

JVC

SERVICE MANUAL

COLOUR TELEVISION

**AV-14RM4SE,
AV-14RM4SN,
AV-14RM4SP**

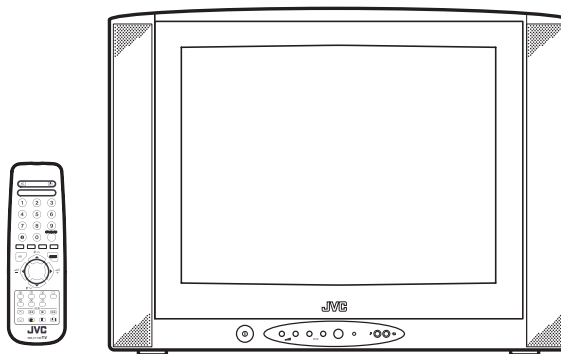


TABLE OF CONTENTS

1	PRECAUTION.....	1-3
2	SPECIFIC SERVICE INSTRUCTIONS.....	1-4
3	DISASSEMBLY	1-5
4	ADJUSTMENT	1-10
5	TROUBLESHOOTING	1-18

SPECIFICATION

Item		Content		
		AV-14RM4SE	AV-14RM4SP	AV-14RM4SN
Dimensions (W × H × D)		45.5 cm × 35.5 cm × 37.8 cm		
Mass		10kg		
TV RF System		B/G, D/K, L	B/G, L	B/G
Colour System	TV Mode	PAL / SECAM		PAL
	Video Mode	PAL / SECAM / NTSC 3.58 / NTSC 4.43		PAL / NTSC 3.58 / NTSC 4.43
Sound System		A2 / NICAM		
Teletext System		TOP / WST		
Receiving Frequency	VHF(VL)	46.25MHz - 168.25MHz		
	VHF(VH)	175.25MHz - 463.25MHz		
	UHF	471.25MHz - 863.25MHz		
	CATV	S01 - S41 / S75 - S79 (B/G), S01 - S20 / S75 - S77(L)		
Intermediate Frequency	VIF	38.9MHz		
	SIF	33.4MHz (5.5MHz:B/G)		
		32.4MHz (6.5MHz:L)		
Colour Sub Carrier Frequency	PAL	4.43MHz		
	SECAM	4.40625MHz / 4.25MHz		
	NTSC	3.58MHz / 4.43MHz		
Power Input		AC220V - AC240V, 50Hz		
Power Consumption		59 W (Max) / 3 W (Standby)		
Aerial Input Terminal		75Ω unbalanced, coaxial		
Picture Tube Size		Visible size : 34cm (14"), Measured diagonally (H: 28.7cm × V: 21.7cm)		
High Voltage		26.5 kV (at zero bean current)		
Speaker		5 cm × 9 cm, Oval type × 2		
Audio Output		2.5 W (THD10%)		
REAR Input / Output	EXT-1	21-pin Euro connector (SCRAT socket) × 1		
	Video output	1V(p-p) 75Ω, RCA pin jack × 1		
	Audio output	500mV(rms) (-4dBs), High Impedance, RCA pin jack × 1		
FRONT Input	Video	1V(p-p) 75Ω, RCA pin jack × 1		
	Audio	500mV(rms) (-4dBs), High Impedance, RCA pin jack × 1		
Headphone jack		Stereo mini jack 3.5mm		
Remote Control Unit		VE-30017763 (RM-C1100), AA/R06 dry battery × 2		

Design & specifications are subject to change without notice.

SECTION 1

PRECAUTION

1.1 SAFETY PRECAUTIONS

- (1) The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
- (4) **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (\perp) side GND, the ISOLATED (NEUTRAL) : (\equiv) side GND and EARTH : (\oplus) side GND.
Don't short between the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND and never measure the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND at the same time with a measuring apparatus (oscilloscope etc.). If above note will not be kept, a fuse or any parts will be broken.
- (5) If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
- (6) The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
- (7) Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10k Ω 2W resistor to the anode button.

- (8) When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

(9) Isolation Check (Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screw heads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

a) Dielectric Strength Test

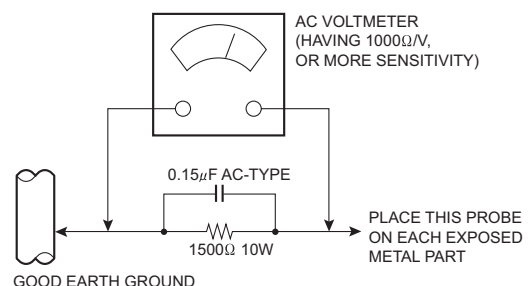
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second. (. . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.) This method of test requires a test equipment not generally found in the service trade.

b) Leakage Current Check

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.). However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

Alternate Check Method

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 Ω per volt or more sensitivity in the following manner. Connect a 1500 Ω 10W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.). However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



SECTION 2

SPECIFIC SERVICE INSTRUCTIONS

2.1 FEATURES

- It is a remote controlled color television.
- It can tune cable channels.
- Controlling the TV is very easy by its menu driven system.
- It has Euroconnector sockets for external device.
- Front AV Input available.
- Full function Teletext (TOP & WST).
- It is possible to connect headphone.
- Direct channel access.
- APS (Automatic Programming System).
- All programs can be named.
- Forward or backward automatic tuning.
- Sleep timer.
- Child Lock.
- Automatic sound muting when no transmission.
- 5 minutes after the broadcasting (close down), the TV switches itself automatically to stand-by mode.

2.2 MAIN DIFFERENCE LIST

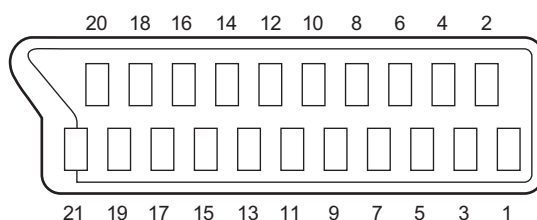
Item	AV-14RM4SE	AV-14RM4SN	AV-14RM4SP
TV RF System	B/G,D/K	B/G	B/G, L
Colour System (TV mode)	PAL, SECAM	PAL	PAL, SECAM
MAIN PWB ASSY	VE-20159378	VE-20159381	VE-20159384

2.3 21-PIN EURO CONNECTOR (SCRAT) : EXT-1

Pin No.	Signal designation	Matching value	EXT-1
1	AUDIO R output	500mV(rms) (Nominal), Low impedance	Used (TV OUT)
2	AUDIO R input	500mV(rms) (Nominal), High impedance	Used (R1)
3	AUDIO L output	500mV(rms) (Nominal), Low impedance	Used (TV OUT)
4	AUDIO GND	---	Used
5	GND (B)	---	Used
6	AUDIO L input	500mV(rms) (Nominal), High impedance	Used (L1)
7	B input	700mV _(B-W) , 75 Ω	Used
8	FUNCTION SW (SLOW SW)	Low : 0V-3V High : 8V-12V, High impedance	Used
9	GND (G)	---	Used
10	SCL / T-V LINK	---	Not used
11	G input	700mV(B-W), 75 Ω	Used
12	SDA3	---	Not used
13	GND (R)	---	Used
14	GND (YS)	---	Used
15	R / C input	R : 700mV _(B-W) , 75 Ω C : 300mV _(P-P) , 75 Ω	Used (R)
16	Ys input (FAST SW)	Low : 0V-0.4V, 75 Ω High : 1V-3V, 75 Ω	Used
17	GND (VIDEO output)	---	Used
18	GND (VIDEO input)	---	Used
19	VIDEO output	1V _(P-P) (Negative sync), 75 Ω	Used (TV OUT)
20	VIDEO / Y input	1V _(P-P) (Negative sync), 75 Ω	Used
21	COMMON GND	---	Used

(P-P= Peak to Peak, B-W= Blanking to white peak)

[Pin assignment]



SECTION 3

DISASSEMBLY

3.1 DISASSEMBLY PROCEDURE

3.1.1 REMOVING THE REAR COVER

- (1) Unplug the power cord.
- (2) Remove the 5 screws marked **[A]**.
- (3) Withdraw the REAR COVER toward you.

3.1.2 REMOVING THE MAIN PWB

- Remove the REAR COVER.
 - (1) Slightly raise the both sides of the MAIN PWB by hand and withdraw the MAIN PWB backward.
(If necessary, take off the wire clamp, connectors etc.)

3.1.3 REMOVING THE SPEAKER

- Remove the REAR COVER.
 - (1) Remove the 4 screws marked **[B]**.
 - (2) Remove the speaker toward you.

3.1.4 REMOVING THE FRONT AV JACK PWB

- Remove the REAR COVER.
- Remove the MAIN PWB.
 - (1) Remove the 2 screws marked **[C]**.
 - (2) Remove the FRONT AV JACK PWB.

3.1.5 REMOVING THE HEADPHONE JACK PWB

- Remove the REAR COVER.
- Remove the MAIN PWB.
 - (1) Remove the 1 screw **[D]**.
 - (2) Remove the HEADPHONE JACK PWB.

3.1.6 CHECKING THE PW BOARD

- To check the back side of the PW Board.
 - (1) Pull out the PW Board. (Refer to REMOVING THE MAIN PWB).
 - (2) Erect the PW Board vertically so that you can easily check the back side of the PW Board.

CAUTION:

- When erecting the PW Board, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the wire connector is properly connected.
- When conducting a check with power supplied, be sure to confirm that the CRT EARTH WIRE (BRAIDED ASS'Y) is connected to the CRT SOCKET PW board.

3.1.7 WIRE CLAMPING AND CABLE TYING

- (1) Be sure to clamp the wire.
- (2) Never remove the cable tie used for tying the wires together.
Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

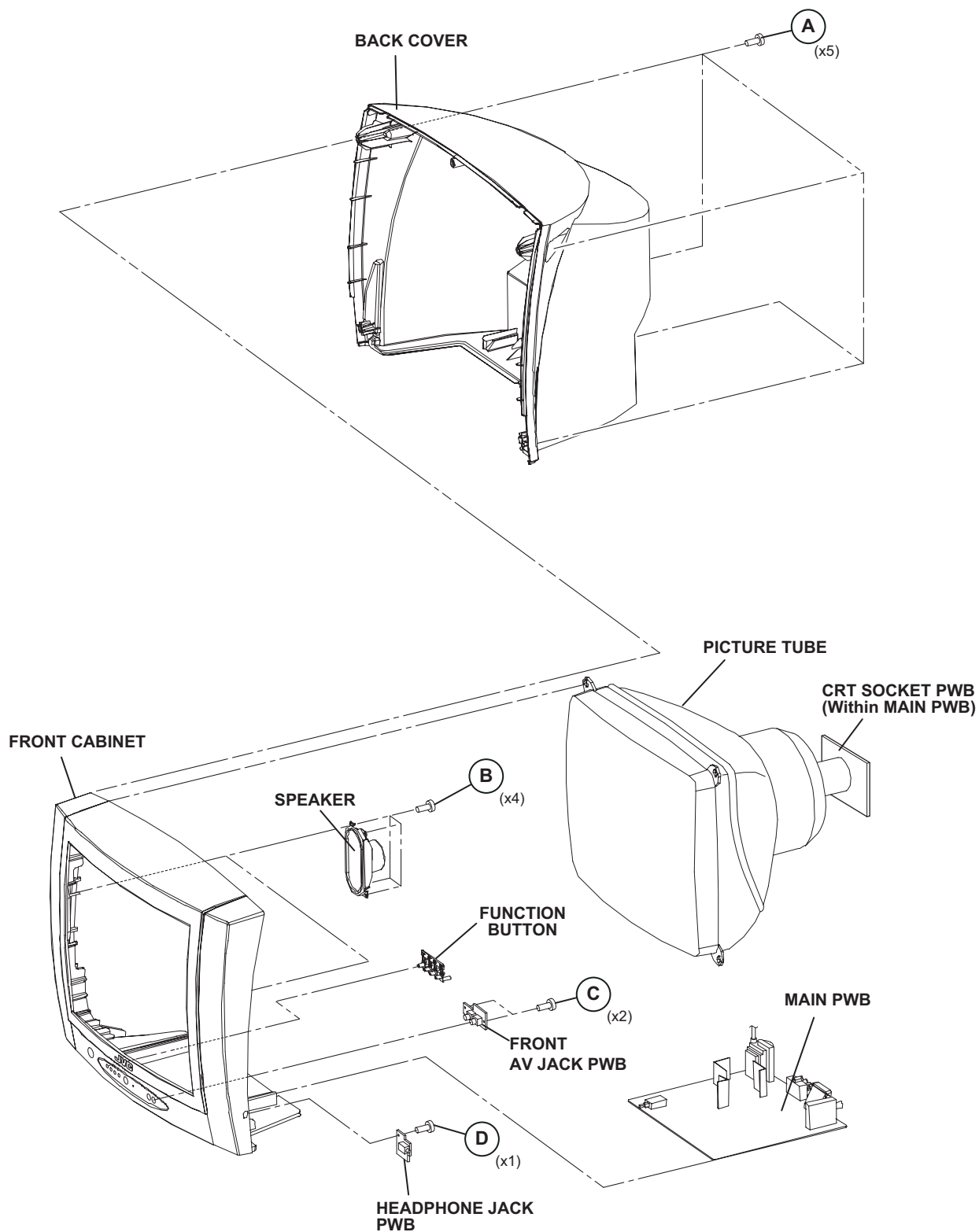


Fig.1

3.2 REPLACEMENT OF MEMORY IC

3.2.1 MEMORY IC

This model use a memory IC. This memory IC stores data for proper operation of the video and deflection circuits. When replacing, be sure to use an IC containing this (initial value)data.

3.2.2 PROCEDURE FOR REPLACING MEMORY IC

PROCEDURE

1. Power off

Switch the power off and unplug the power cord from the outlet

2. Replace IC.

Be sure to use memory IC written with the initial data values.

3. Power on

Plug the power cord into the outlet and switch the power on.

4. SERVICE MENU setting

- (1) Press [MENU] key and, while the displayed MENU screen, press [4], [7], [2], [5] key on the remote control unit or press [MUTING] key and [INFORMATION] key at the simulta-neously.
- (2) The SERVICE MENU screen of Fig. 1 will be displayed.
- (3) Verify what to set in the SERVICE MENU, and set whatever is necessary (Fig.1). Refer to the SERVICE ADJUSTMENT for setting.
- (4) Press the [STANDARD] key to exit SERVICE MENU.

5. Receive channel setting

Refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the receive channels (Channels Preset) as described.

6. User settings

Check the user setting items according to after page. Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the items as described.

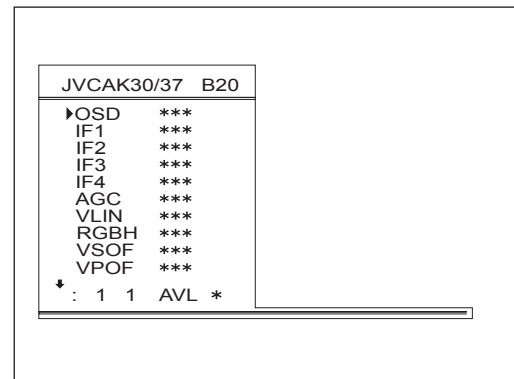


Fig.1

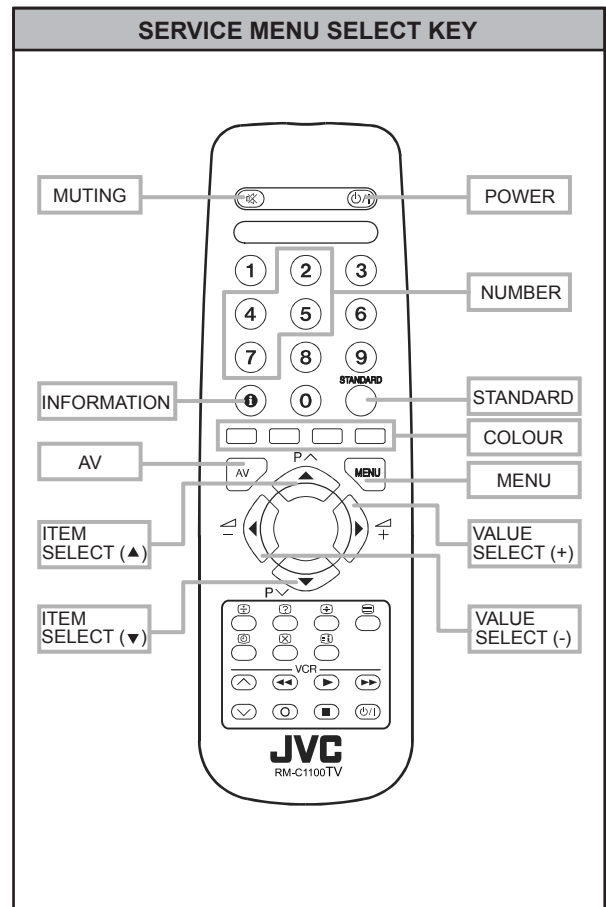


Fig.2

3.3 SETTING OF THE LAST MEMORY FOR SHIPMENT

3.3.1 USER SETTING VALUES

Setting item	Setting value	Setting item	Setting value
PICTURE MENU		FEATURE MENU	
BRIGHTNESS	These adjust are automatically restored when APS bit in Service menu is set. The procedure for setting APS bit is described bellow.	SLEEP TIMER	OFF
CONTRAST		CHILD LOCK	OFF
COLOUR		LANGUAGE	ENGLISH
SHARPNESS		AV-1 OUTPUT	TV
HUE (only NTSC)			
MODE	AUTO		
SOUND MENU		INSTALL	
BALANCE	Center	PROGRAMME	Refer to the INSTRUCTION BOOK
BASS	Center	BAND	
TREBLE	Center	CHANNEL	
MODE	MONO	SERCH	
EFFECT	OFF	FINE TUNING	
		STORE	

3.3.2 SETTING APS BIT IN SERVICE MENU

- (1) Press the **[INFORMATION]** and **[MUTING]** keys enter service menu in TV mode simultaneously. Service Menu will appear.
- (2) Press the **[▲]/[▼]** key to select TX1(TELETEXT OPTION).
- (3) Press the **[7]** key to set APS bit. (After this, bit 7 of TX1 will be "1")
- (4) Press **[STANDARD]** key to exit service mode.

NOTE : DO NOT TURN OFF THE TV BY USING POWER BUTTON ON THE FRONT PANEL.

3.4 REPLACEMENT OF CHIP COMPONENT

3.4.1 CAUTIONS

- (1) Avoid heating for more than 3 seconds.
- (2) Do not rub the electrodes and the resist parts of the pattern.
- (3) When removing a chip part, melt the solder adequately.
- (4) Do not reuse a chip part after removing it.

3.4.2 SOLDERING IRON

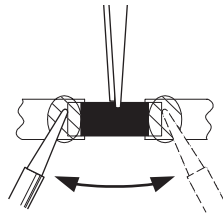
- (1) Use a high insulation soldering iron with a thin pointed end of it.
- (2) A 30w soldering iron is recommended for easily removing parts.

3.4.3 REPLACEMENT STEPS

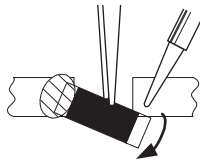
1. How to remove Chip parts

[Resistors, capacitors, etc.]

- (1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



- (2) Shift with the tweezers and remove the chip part.

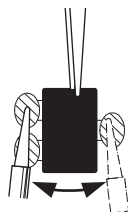


[Transistors, diodes, variable resistors, etc.]

- (1) Apply extra solder to each lead.



- (2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.



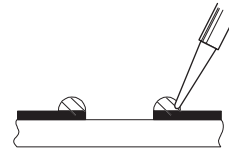
NOTE :

After removing the part, remove remaining solder from the pattern.

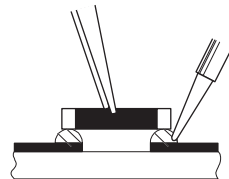
2. How to install Chip parts

[Resistors, capacitors, etc.]

- (1) Apply solder to the pattern as indicated in the figure.

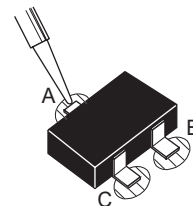


- (2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

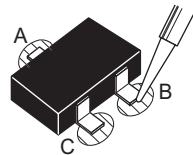


[Transistors, diodes, variable resistors, etc.]

- (1) Apply solder to the pattern as indicated in the figure.
- (2) Grasp the chip part with tweezers and place it on the solder.
- (3) First solder lead **A** as indicated in the figure.



- (4) Then solder leads **B** and **C**.



SECTION 4 ADJUSTMENT

4.1 ADJUSTMENT PREPARATION

- (1) You can make the necessary adjustments for this unit with either the Remote Control Unit or with the adjustment tools and parts as given below.
- (2) Adjustment with the Remote Control Unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.
- (3) Make sure that AC power is turned on correctly.
- (4) Turn on the power for set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
- (5) Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
- (6) Never touch any adjustment parts which are not specified in the list for this adjustment - variable resistors, transformers, condensers, etc.
- (7) Presetting before adjustment.
Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit:

Setting item	Setting value
BRIGHTNESS	Center
CONTRAST	
COLOUR	
SHARPNESS	

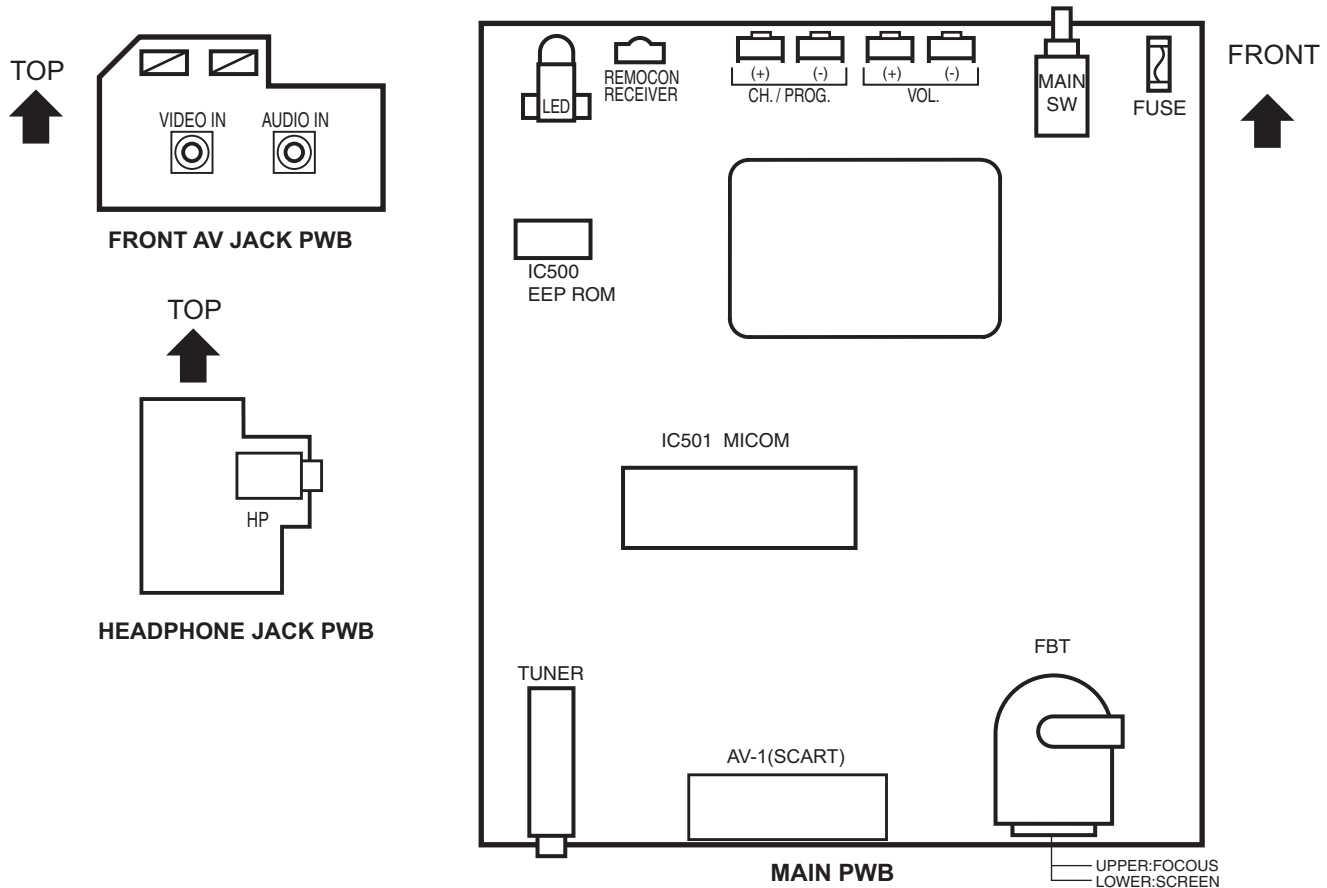
4.2 MEASURING EQUIPMENT

- (1) DC voltmeter (or digital voltmeter)
- (2) Signal generator (Pattern generator)
[PAL / SECAM / NTSC]
- (3) Remote control unit

4.3 ADJUSTMENT ITEM

- FOCUS ADJUSTMENT
- SCREEN ADJUSTMENT
- OSD HORIZONTAL POSITION ADJUSTMENT
- IF ADJUSTMENT
- AGC AUTOMATICALLY ADJUSTMENT
- DEFLECTION ADJUSTMENT
- WHITE BALANCE ADJUSTMENT

4.4 ADJUSTMENT LOCATIONS



4.5 BASIC OPERATION OF SERVICE MODE

4.5.1 HOW TO ENTER THE SERVICE MODE

- (1) Press the [MENU] key.
- (2) MENU screen will be displayed.(Fig.1)

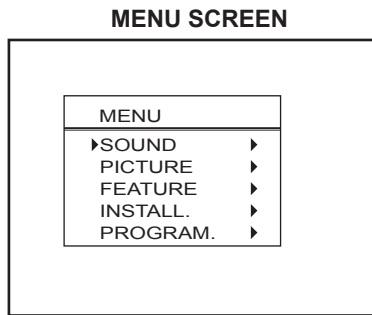


Fig.1

- (3) While the MENU screen is displayed, press the [4], [7], [2], [5] key or [INFORMATION] key and [MUTING] key simultaneously.
- (4) The SERVICE MENU screen will be displayed.(Fig.2)

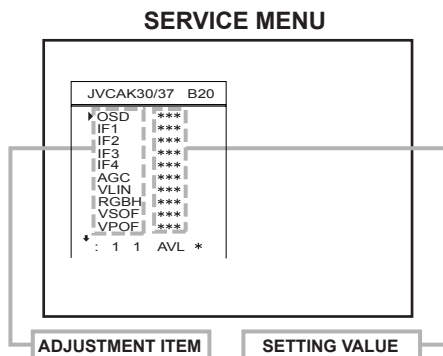


Fig.2

4.5.2 SELECTION OF ADJUSTMENT ITEMS

- (1) Enter the SERVICE MODE
- (2) Press the FUNCTION [▲]/[▼] key to select the adjustment item.
- (3) Press the FUNCTION [◀]/[▶] key to set the setting value.

4.5.3 HOW TO EXIT SERVICE MODE

- (1) Press the [STANDARD] key.

4.5.4 HOW TO ENTER THE GEOMETRY MENU

This model is built-in GEOMETRY MENU for geometry adjustment.

- (1) Enter the SERVICE MENU
- (2) Press the [GREEN] key, geometry menu appears (Fig. 3).
- (3) Press the FUNCTION [▲]/[▼] key to select the adjustment item.
- (4) Press the FUNCTION [◀]/[▶] key to set the setting value.

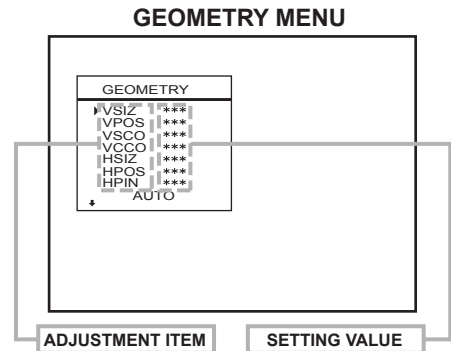
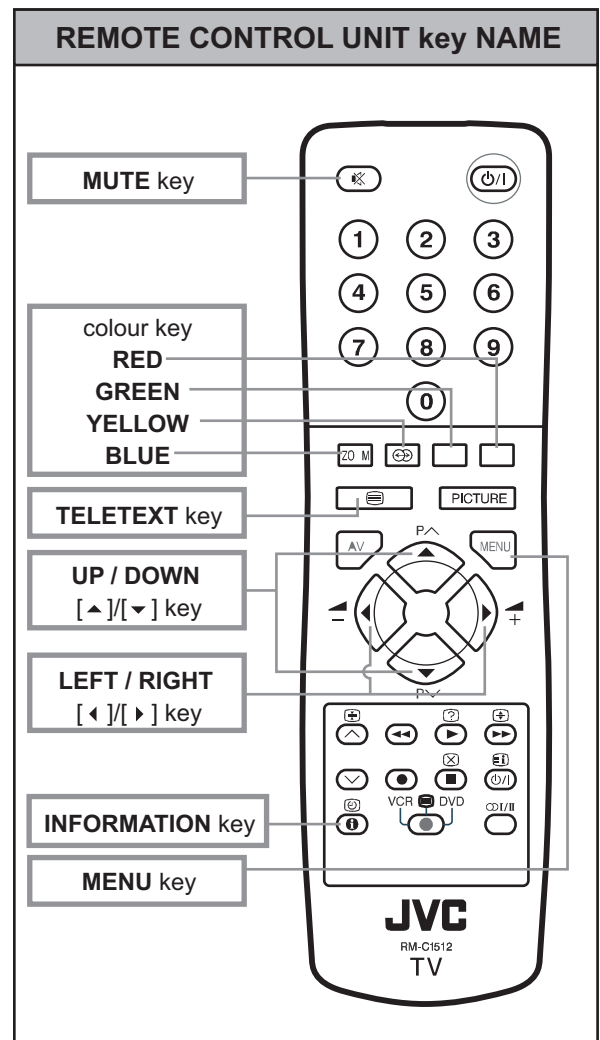


Fig.3



4.5.5 ADJUSTMENT ITEM

4.5.5.1 SERVICE MENU

Adjustment item	Description
OSD	HORIZONTAL POSITION OF OSD
IF1	IF COARSE ADJUSTMENT
IF2	IF FINE ADJUSTMENT
IF3	IF COARSE ADJUSTMENT FOR L-PRIME
IF4	IF FINE ADJUSTMENT FOR L-PRIME
AGC	AUTOMATIC GAIN CONTROL
VLIN	VERTICAL LINEARITY
RGBH	RGB MODE HORIZONTAL SHIFT OFFSET
VSOE	VERTICAL SIZE OFFSET for 60Hz
VPOF	VERTICAL POSITION OFFSET for 60Hz
HSOF	HORIZONTAL SIZE OFFSET for 60Hz
HPOF	HORIZONTAL POSITION OFFSET for 60Hz
HTOF	HORIZONTAL TRAPEZOID OFFSET for 60Hz
WR	WHITE POINT ADJUSTMENT FOR RED
WG	WHITE POINT ADJUSTMENT FOR GREEN
WB	WHITE POINT ADJUSTMENT FOR BLUE
BR	BIAS FOR RED
BG	BIAS FOR GREEN
APR	AUTOMATIC RGB PEAK REGULATION THRESHOLD
BRI	BRIGHTNESS
CON	CONTRAST
COL	COLOUR
SHA	SHARP
HUE	HUE
VOL	VOLUME
WR-R	WHITE POINT ADJUSTMENT for RED (RGBmode)
WG-R	WHITE POINT ADJUSTMENT for GREEN (RGBmode)
WB-R	WHITE POINT ADJUSTMENT for BLUE (RGBmode)
FMP1	FM PRESCALER WHEN AVL IS OFF
NIP1	NICAM PRESCALER WHEN AVL IS OFF
SCP1	SCART PRESCALER WHEN AVL IS OFF
SEC1	SECAM PRESCALER WHEN AVL IS OFF
FMP2	FM PRESCALER WHEN AVL IS ON
NIP2	NICAM PRESCALER WHEN AVL IS ON
SCP2	SCART PRESCALER WHEN AVL IS ON
SEC2	SECAM PRESCALER WHEN AVL IS ON
F1H	HIGH BYTE OF VHF1-VHF3 CROSS-OVER FREQUENCY
F1L	LOW BYTE OF VHF1-VHF3 CROSS-OVER FREQUENCY

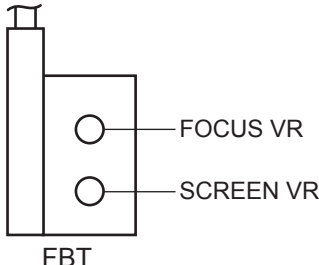
Adjustment item	Description
F2H	HIGH BYTE OF VHF3-UHF CROSS-OVER FREQUENCY
F2L	LOW BYTE OF VHF3-UHF CROSS-OVER FREQUENCY
BS1	BAND SWITCHING BYTE FOR VHF1
BS2	BAND SWITCHING BYTE FOR VHF3
BS3	BAND SWITCHING BYTE FOR UHF
CB	CONTROL BYTE
OP1	PERIPHERAL OPTIONS
OP2	RECEPTION STANDARD OPTIONS
OP3	VIDEO OPTIONS
OP4	TV FEATURES
OP5	CHANNEL TABLES
TX1	TELETEXT OPTIONS
GEOM	GEOMETRY OPTIONS
OP8	PIP PRESET CHANGE

4.5.5.2 GEOMETRY MENU

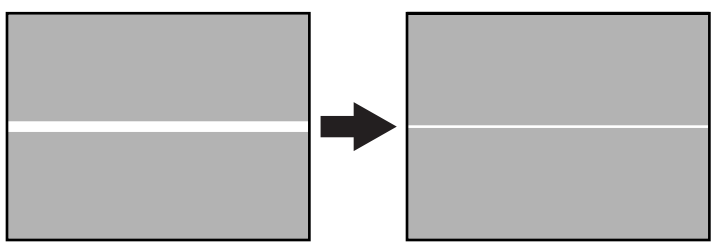
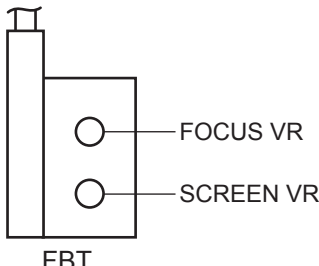
Adjustment item	Description
VSIZ	VERTICAL SIZE for 50Hz
VPOS	VERTICAL POSITION for 50Hz
VSCO	VERTICAL S-CORRECTION for 50Hz
VCCO	VERTICAL CORNER CORRECTION for 50Hz
HSIZ	HORIZONTAL SIZE for 50Hz
HPOS	HORIZONTAL POSITION for 50Hz
HPIN	HORIZONTAL PINCUSHION for 50Hz
HCCO	HORIZONTAL CORNER CORRECTION for 50H
HTRP	HORIZONTAL TRAPEZOID for 50Hz
VZSZ	VERTICAL ZOOM SIZE for 50Hz

4.6 ADJUSTMENTS PROCEDURE

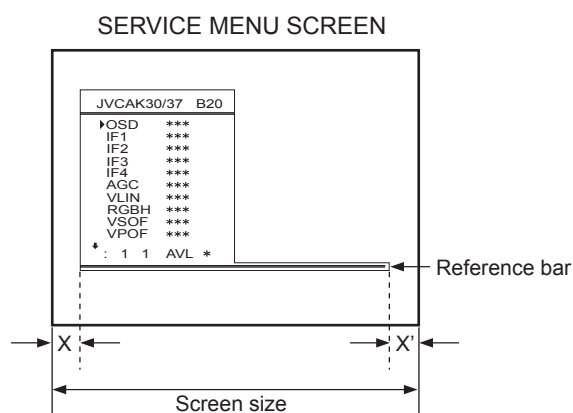
4.6.1 FOCUS ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
FOCUS adjustment	Signal generator Remote control unit		FOCUS VR [On the FBT]	<p>(1) Receive a PAL cross-hatch signal. (2) Adjust FOCUS VR on the FBT as thin as possible.</p> 

4.6.2 SCREEN ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
SCREEN adjustment	Remote control unit		SCREEN VR [On the FBT]	<p>(1) Enter the SERVICE MENU. (2) Press the [YELLOW] key to disable vertical scan. (3) Adjust SCREEN VR on the FBT as thin as possible. (4) Press [YELLOW] key again to enable vertical scan. (5) Press [STANDARD] key to leave service menu.</p>  

4.6.3 OSD ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
HORIZONTAL POSITION OF OSD adjustment	Remote control unit		OSD	<p>(1) Enter the SERVICE MENU. (2) Select OSD with the [▲]/[▼] key. (3) Adjust the OSD horizontal position with the [◀]/[▶] key, which shifts the reference bar on the bottom of the SERVICE MENU horizontally, so that the OSD is positioned on the screen center. ($X=X'$)</p> 

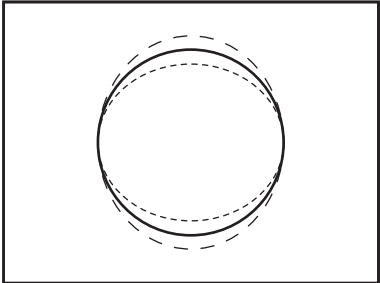
4.6.4 IF ADJUSTMENT

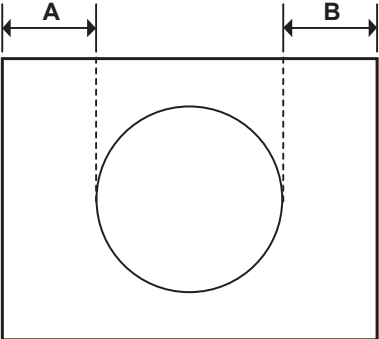
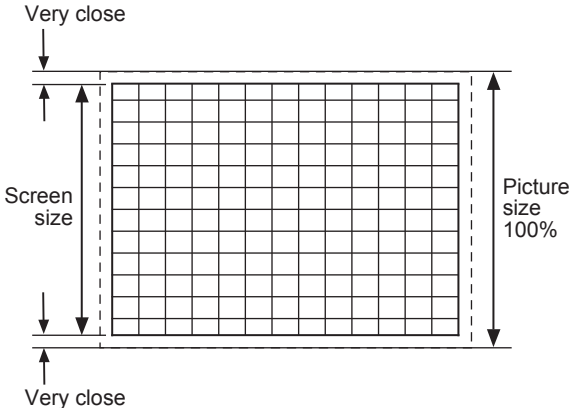
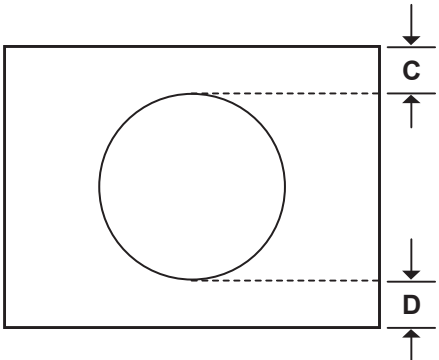
Item	Measuring instrument	Test point	Adjustment part	Description
IF adjustment	Remote control unit		IF 1 IF 2 IF 3 IF 4	(1) Receive a PAL colour bar pattern. (2) Enter the SERVICE MENU. (3) Select IF 1 with the [▲]/[▼] key. (4) Press [BLUE] key during IF 1 is highlighted, IF 1 and IF 2 values are adjusted automatically by software. (5) If the standard is L-prime, IF 3 and IF 4 values are adjustment automatically when [BLUE] key is pressed during IF 1 is highlighted.

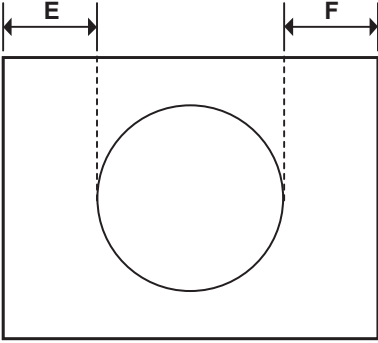
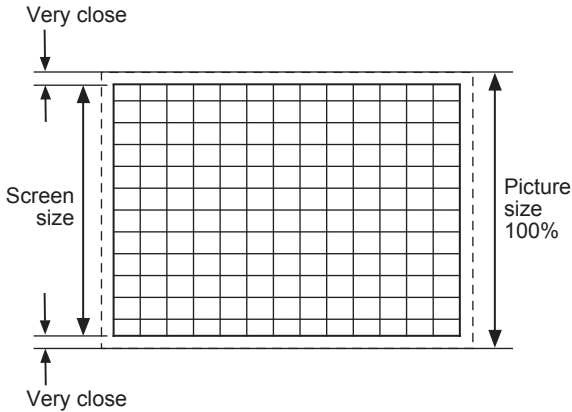
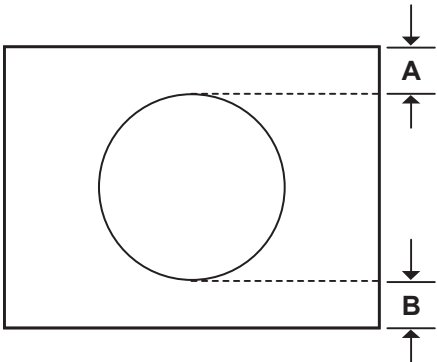
4.6.5 AGC AUTOMATICALLY ADJUSTMENT

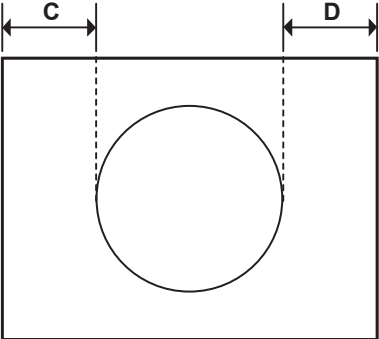
Item	Measuring instrument	Test point	Adjustment part	Description						
AGC AUTOMATICALLY adjustment	Remote control unit		AGC	<div>(1) Receive a 60dBmV RF signal level.</div> <div>(2) Enter the SERVICE MENU.</div> <div>(3) Select AGC with the [▲]/[▼] key.</div> <div>(4) Press [BLUE] key.</div> <div>(5) The adjustment will be done automatically by software.</div> <div>(6) See the AGC indicator on SERVICE MENU, it must be "1".</div> <div>(7) Check that picture is normal at 90dBmV signal level.</div>						
<div><div><div>JVCAK30/37 B20</div><div>OSD ***</div><div>IF1 ***</div><div>IF2 ***</div><div>IF3 ***</div><div>IF4 ***</div><div>▶AGC ***</div><div>VLIN ***</div><div>RGBH ***</div><div>VSOFF ***</div><div>VPOF ***</div><div>* 1 1 AVL *</div></div><div></div></div> <div><table><tr><th>IF INDICATOR</th><th>AGC INDIXATOR</th><th>NON</th></tr><tr><td>:</td><td>1</td><td>1</td></tr></table></div>				IF INDICATOR	AGC INDIXATOR	NON	:	1	1	
IF INDICATOR	AGC INDIXATOR	NON								
:	1	1								

4.6.6 DEFLECTION ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
VERTICAL LINEARITY adjustment	Signal generator Remote control unit		VLIN	(1) Receive a PAL circle pattern. (2) Enter the SERVICE MENU. (3) Select VLIN with the [▲]/[▼] key. (4) Adjust VLIN with the [◀]/[▶] key until circle as round as possible.
				

Item	Measuring instrument	Test point	Adjustment part	Description
RGB MODE HORIZONTAL SHIFT adjustment	Signal generator Remote control unit		RGBH	<ol style="list-style-type: none"> (1) Input R/G/B circle pattern signal via video input terminal. (2) Press [AV] key, force the TV to RGB mode. (3) Enter the SERVICE MENU. (4) Select RGBH with the [▲]/[▼] key. (5) Adjust RGBH with the [◀]/[▶] key until the circle pattern is horizontally centered. (A=B) (6) Check and readjust RGBH item if the adjustment becomes improper after some other geometric adjustments are done.
				
VERTICAL SIZE OFFSET (60Hz) adjustment	Signal generator Remote control unit		VSOF	<ol style="list-style-type: none"> (1) Receive a NTSC-M cross-hatch pattern of vertical frequency 60Hz. (2) Enter SERVICE MENU. (3) Select VSOF with the [▲]/[▼] key. (4) Adjust VSOF with the [◀]/[▶] key until the horizontal black lines on both the upper and lower part of the pattern become very close to the upper and lower horizontal sides of picture size and nearly about to disappear. (5) Check and readjust VSOF item if the adjustment becomes improper after some other geometric adjustments are done.
				
VERTICAL POSITION OFFSET (60Hz) adjustment	Signal generator Remote control unit		VPOF	<ol style="list-style-type: none"> (1) Receive a NTSC circle pattern of vertical frequency 60Hz. (2) Enter the SERVICE MENU. (3) Select VPOF with the [▲]/[▼] key. (4) Adjust VPOF with the [◀]/[▶] key until the picture is vertically centered. (C=D) (5) Check and readjust vertical position item if the adjustment becomes improper after some other geometric adjustments are done.
				

Item	Measuring instrument	Test point	Adjustment part	Description
HORIZONTAL POSITION OFFSET (60Hz) adjustment	Signal generator Remote control unit		HPOF	(1) Receive a NTSC circle pattern signal of vertical frequency 60Hz. (2) Enter the SERVICE MENU. (3) Select HPOF with the [▲]/[▼] key. (4) Adjust HPOF with the [◀]/[▶] key until the circle pattern is horizontally centered. (E=F) (5) Check and readjust a horizontal position item if the adjustment becomes improper after some other geometric adjustments are done. Press the [MENU] key and memorize the set value.
				
VERTICAL SIZE (50Hz) adjustment	Signal generator Remote control unit		VSIZ	(1) Receive a PAL crosshatch pattern of vertical frequency 50Hz. (2) Enter the SERVICE MENU. (3) Press the [GREEN] key to enter the GEOMETRY MENU. (4) Select VSIZ (Vertical size) with the [▲]/[▼] key. (5) Adjust VSIZ with the [◀]/[▶] key until the horizontal black lines on both the upper and lower horizontal sides of picture size and nearly about to disappear. (6) Check and readjust VSIZ item if the adjustment becomes improper after some other geometric adjustments are done.
				
VERTICAL POSITION (50Hz) adjustment	Signal generator Remote control unit		VPOS	(1) Receive a PAL circle pattern signal of vertical frequency 50Hz. (2) Enter the GEOMETRY MENU. (3) Select VPOS (Vertical position) with the [▲]/[▼] key. (4) Adjust VPOS with the [◀]/[▶] key until the circle pattern is vertically centered. (A=B) (5) Check and readjust VPOS item if the adjustment becomes improper after some other geometric adjustments are done.
				

Item	Measuring instrument	Test point	Adjustment part	Description
HORIZONTAL POSITION OFFSET (50Hz) adjustment	Signal generator Remote control unit		HPOS	(1) Receive a PAL circle pattern signal of vertical frequency 50Hz. (2) Enter the GEOMETRY MENU. (3) Select HPOS (Horizontal position) with the [▲]/[▼] key. (4) Adjust HPOS with the [◀]/[▶] key until the circle pattern is horizontally centered. (C=D) (5) Check and readjust HPOS item if the adjustment becomes improper after some other geometric adjustments are done.
 <p>The diagram shows a circle centered within a rectangular frame. Two vertical dashed lines extend from the top edge of the rectangle to the circle's edge. The horizontal distance from the left edge of the rectangle to the left dashed line is labeled 'C'. The horizontal distance from the right dashed line to the right edge of the rectangle is labeled 'D'.</p>				

4.6.7 VIDEO CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
WHITE BALANCE (Low light) adjustment	Signal generator Remote control unit		WR WG WB	(1) Receive a black & white signal (colour off). (2) Enter the SERVICE MENU. (3) Select WR / WG / WB with the [▲]/[▼] key respectively. (4) Adjust WR / WG / WB with the [◀]/[▶] key, respectively, until the white part turns to pure white without any other colour.
WHITE BALANCE (High light) adjustment	Signal generator Remote control unit		BR BG	(1) Receive a black & white signal (colour off). (2) Enter the SERVICE MENU. (3) Select BR / BG with the [▲]/[▼] key respectively. (4) Adjust BR / BG with the [◀]/[▶] key, respectively until the white part of screen make white colour.

SECTION 5

TROUBLESHOOTING

This service manual does not describe TROUBLESHOOTING.



Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY VIDEO DISPLAY CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

(No.YA081)



Printed in Japan
VPT

PARTS LIST

CONTENTS

USING P.W. BOARD & REMOTE CONTROL UNIT	3-1
EXPLODED VIEW PARTS LIST	3-2
EXPLODED VIEW	3-3
PRINTED WIRING BOARD PARTS LIST [AV-14RM4SE]	3-4
MAIN P.W. BOARD ASS'Y (VE-20159378)	3-4
FRONT AV JACK P.W. BOARD ASS'Y (VE-20124552)	3-6
HEADPHONE JACK P.W. BOARD ASS'Y (VE-20170438)	3-6
PRINTED WIRING BOARD PARTS LIST [AV-14RM4SN]	3-7
MAIN P.W. BOARD ASS'Y (VE-20159381)	3-7
FRONT AV JACK P.W. BOARD ASS'Y (VE-20124552)	3-9
HEADPHONE JACK P.W. BOARD ASS'Y (VE-20170438)	3-9
PRINTED WIRING BOARD PARTS LIST [AV-14RM4SP]	3-10
MAIN P.W. BOARD ASS'Y (VE-20159384)	3-10
FRONT AV JACK P.W. BOARD ASS'Y (VE-20124552)	3-12
HEADPHONE JACK P.W. BOARD ASS'Y (VE-20170438)	3-12
PACKING	3-13
PACKING PARTS LIST	3-13

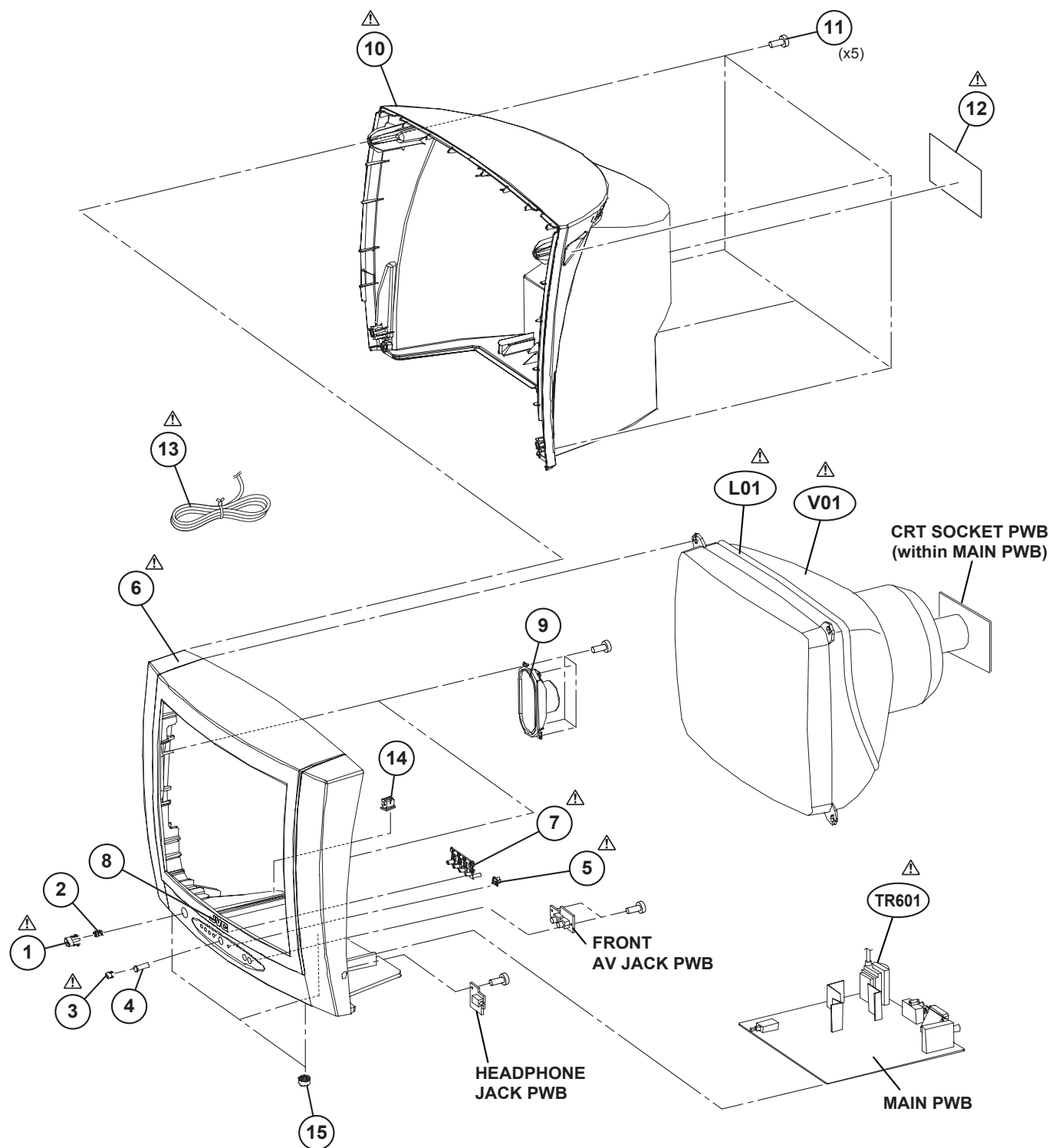
USING P.W. BOARD & REMOTE CONTROL UNIT

P.W.B ASS'Y name	AV-14RM4SE	AV-14RM4SN	AV-14RM4SP
MAIN P.W.B. (with CRT SOCKET P.W.B.)	VE-20159378	VE-20159381	VE-20159384
FRONT AV JACK P.W.B.	VE-20124552	←	←
HEADPHONE JACK P.W.B.	VE-20170438	←	←
REMOTE CONTROL UNIT	VE-30017763 (RM-C1100)	←	←

EXPLODED VIEW PARTS LIST

△	Ref.No.	Part No.	Part Name	Description	Local
△	V01	VE-30002747	PICTURE TUBE (ITC)	Inc. DY, PC MAGNET	
△	L01	VE-30002113	DEG COIL&EARTH CB		
△	TR601	VE-30017788	TRF FBT	within MAIN PWB	
△	1	VE-20177854	BUTTTON ON/OFF		
	2	VE-35000013	SPRING ON/OFF SWITCH		
△	3	VE-20143961	LENS		
	4	VE-20004333	LENS PRE-AMP		
△	5	VE-20056446	LENS LED		
△	6	VE-20159322	FRONT CABINET		
△	7	VE-20176671	BUTTON FUNCTION		
	8	VE-40021473	LOGO JVC		
	9	VE-30001951	SPEAKER	(x2) 8Ω 8W (50*90)	
△	10	VE-20143801	BACK COVER		
	11	VE-35010702	SCREW (4x20)	(x5)	
△	12	VE-20159451	LABEL		AV-14RM4SN
△	12	VE-20159447	LABEL		AV-14RM4SP
△	12	VE-20159465	LABEL		AV-14RM4SE
△	13	VE-30029498	POWER CORD	2.2MT	
	14	VE-20004520	CABLE HOLDER		
	15	VE-20004646	FOOT RUBBER	(x3)	

EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST [AV-14RM4SE]

MAIN P.W. BOARD ASS'Y (VE-20159378)

△Ref No.	Part No.	Part Name	Description Local
IC403	VE-30026922	IC	
IC404	VE-30001612	IC	
IC500	VE-20109900	IC (MEMORY)	
IC501	VE-20093790	IC (MICOM)	
IC502	VE-30001670	PREAMPLIFIER	
△IC600	VE-30015306	IC	
IC810	VE-20079043	IC	
IC841	VE-30001627	IC	
IC842	VE-30001622	IC	
Q101	VE-30001457	TRANSISTOR	
Q102	VE-30001457	TRANSISTOR	
Q103	VE-30001457	TRANSISTOR	
Q104	VE-30001457	TRANSISTOR	
Q458	VE-30001457	TRANSISTOR	
Q459	VE-30001457	TRANSISTOR	
Q501	VE-30001458	TRANSISTOR	
Q601	VE-30013656	TRANSISTOR POWER	
△Q602	VE-20090846	TRANSISTOR	
Q603	VE-30001457	TRANSISTOR	
Q801	VE-30001385	TRANSISTOR	
Q803	VE-30001457	TRANSISTOR	
Q805	VE-30014346	IC	
Q901	VE-30001461	TRANSISTOR	
Q902	VE-30001461	TRANSISTOR	
Q903	VE-30001461	TRANSISTOR	
Q904	VE-30001426	TRANSISTOR	
Q905	VE-30001426	TRANSISTOR	
Q906	VE-30001426	TRANSISTOR	
D101	VE-30007763	DIODE ZENER	
D108	VE-30009699	DIODE ZENER	
D109	VE-30007763	DIODE ZENER	
D110	VE-30007763	DIODE ZENER	
D111	VE-30003720	DIODE ZENER	
D402	VE-30007763	DIODE ZENER	
D406	VE-30001285	DIODE	
D407	VE-30001285	DIODE	
D410	VE-30018576	DIODE ZENER	
D411	VE-30018576	DIODE ZENER	
D412	VE-30018576	DIODE ZENER	
D413	VE-30009699	DIODE ZENER	
D414	VE-30009699	DIODE ZENER	
D501	VE-30001285	DIODE	
D502	VE-30007761	DIODE ZENER	
D503	VE-30001284	DIODE	
D504	VE-30001284	DIODE	
D505	VE-30001377	DIODE ZENER	
D509	VE-30001279	LED RED/GREEN	
D601	VE-30001329	DIODE	
D602	VE-30001285	DIODE	
D604	VE-30001318	DIODE	
D605	VE-30001318	DIODE	
D606	VE-30001318	DIODE	
D609	VE-30001284	DIODE	
D610	VE-30009699	DIODE ZENER	
D801	VE-30001285	DIODE	
D802	VE-30001318	DIODE	
D803	VE-30001331	DIODE	
D804	VE-30001288	DOIDE	
D805	VE-30001301	DIODE	
D806	VE-30001288	DOIDE	
△D811	VE-30001318	DIODE	
D839	VE-30007763	DIODE ZENER	
D901	VE-30001285	DIODE	
D902	VE-30001285	DIODE	
D903	VE-30001285	DIODE	
C103	VE-30000371	CAP EL	22UF 50V M
C104	VE-30012589	CAP SMD	4.7NF 50V K
C105	VE-30016654	CAP SMD	100NF 16V K R
C106	VE-30012589	CAP SMD	4.7NF 50V K
C108	VE-30012589	CAP SMD	4.7NF 50V K
C201	VE-30000400	CAP EL	47UF 50V M
C206	VE-30000371	CAP EL	22UF 50V M
C207	VE-30012610	CAP SMD	10NF 50V J
C208	VE-30012610	CAP SMD	10NF 50V J
C401	VE-30000345	CAP EL	10UF 50V M
C402	VE-30000289	CAP SMD	10NF 50V K R
C403	VE-30012610	CAP SMD	10NF 50V J
C404	VE-30016654	CAP SMD	100NF 16V K R
C405	VE-30016654	CAP SMD	100NF 16V K R

△Ref No.	Part No.	Part Name	Description Local
C408	VE-30000074	CAP MKT	100NF 63V J
C409	VE-30000384	CAP EL	2.2UF 50V M
C410	VE-30000109	CAP MKT	470NF 63V J
C411	VE-30000074	CAP MKT	100NF 63V J
C413	VE-30016654	CAP SMD	100NF 16V K R
C415	VE-30000362	CAP EL	1UF 50V M.
C416	VE-30012586	CAP SMD	22NF 50V K
C417	VE-30000362	CAP EL	1UF 50V M.
C418	VE-30000362	CAP EL	1UF 50V M.
C419	VE-30000074	CAP MKT	100NF 63V J
C420	VE-30000345	CAP EL	10UF 50V M
C421	VE-30012581	CAP SMD	1NF 50V K R
C422	VE-30000100	CAP MKT	330NF 63V J
C423	VE-30012586	CAP SMD	22NF 50V K
C424	VE-30000109	CAP MKT	470NF 63V J
C425	VE-30000074	CAP MKT	100NF 63V J
C427	VE-30000362	CAP EL	1UF 50V M.
C428	VE-30000362	CAP EL	1UF 50V M.
C429	VE-30012586	CAP SMD	22NF 50V K
C431	VE-30016654	CAP SMD	100NF 16V K R
C432	VE-30016654	CAP SMD	100NF 16V K R
C434	VE-30012586	CAP SMD	22NF 50V K
C435	VE-30012585	CAP SMD	2.2NF 50V K R
C436	VE-30007082	CAP MKT	680NF 63V J
C438	VE-30000384	CAP EL	2.2UF 50V M
C440	VE-30012589	CAP SMD	4.7NF 50V K
C442	VE-30000362	CAP EL	1UF 50V M
C443	VE-30000345	CAP EL	10UF 50V M
C458	VE-30012567	CAP SMD	220PF 50V J
C459	VE-30000345	CAP EL	10UF 50V M
C460	VE-30000371	CAP EL	22UF 50V M
C464	VE-30012610	CAP SMD	10NF 50V J
C465	VE-30012575	CAP SMD	4.7PF 50V C CH
C468	VE-30012574	CAP SMD	470PF 50V J
C501	VE-30000074	CAP MKT	100NF 63V J
C502	VE-30000396	CAP EL	47UF 16V M
C503	VE-30012603	CAP SMD	100NF 25V K R
C504	VE-30012589	CAP SMD	4.7NF 50V K
C508	VE-30012586	CAP SMD	22NF 50V K
C509	VE-30012566	CAP SMD	22PF 50V J
C511	VE-30000371	CAP EL	22UF 50V M
C513	VE-30012579	CAP SMD	82PF 50V J
C514	VE-30000100	CAP MKT	330NF 63V J
C515	VE-30012586	CAP SMD	22NF 50V K
C518	VE-30012560	CAP SMD	100PF 50V J
C519	VE-30012562	CAP SMD	15PF 50V J
C520	VE-30012562	CAP SMD	15PF 50V J
C521	VE-30012585	CAP SMD	2.2NF 50V K R
C523	VE-30012566	CAP SMD	22PF 50V J
C526	VE-30012589	CAP SMD	4.7NF 50V K
C534	VE-30000431	CAP CER	100PF 1KV M
C535	VE-30006753	CAP CER	220PF 1KV K B
C536	VE-30012607	CAP SMD	150PF 50V J
C538	VE-30012560	CAP SMD	100PF 50V J
C539	VE-30000400	CAP EL	47UF 50V M
C540	VE-30000315	CAP SMD	220NF 25V Z
C541	VE-30012590	CAP SMD	47NF 50V K
C542	VE-30010571	CAP EL	10UF 16V M
C602	VE-30000107	CAP MKT	47NF 250V J
C603	VE-30000100	CAP MKT	330NF 63V J
C604	VE-30018416	CAP EL	470UF 16V M 105°
C605	VE-30000354	CAP EL	100UF 35V M
C606	VE-30000092	CAP MKT	220NF 63V J
C607	VE-30016085	CAP EL	10UF 63V 105°
C609	VE-30000371	CAP EL	22UF 50V M
C610	VE-30000360	CAP EL	1000UF 25V M
C613	VE-30000350	CAP EL	10UF 250V M
C617	VE-30007750	CAP EL	470UF 35V
C618	VE-30000092	CAP MKT	220NF 63V J
C619	VE-30000384	CAP EL	2.2UF 50V M
C643	VE-30000394	CAP EL	3.3UF 160V M
C644	VE-30000345	CAP EL	10UF 50V M
C646	VE-30012581	CAP SMD	1NF 50V K R
C647	VE-30000116	CAP MKT	68NF 63V J
C648	VE-30012609	CAP SMD	68NF 50V K
C649	VE-30012573	CAP SMD	47PF 50V J
C650	VE-30000294	CAP SMD	100NF 50V K
△C801	VE-30000094	CAP MKT	220NF 275V M AC
△C802	VE-30000084	CAP MKT	150NF 275V M AC P=15
C805	VE-30012585	CAP SMD	2.2NF 50V K R
C806	VE-30012574	CAP SMD	470PF 50V J
C807	VE-30000090	CAP MKT	22NF 100V J
C808	VE-30000418	CAP EL	100UF 400V M
C810	VE-30000315	CAP SMD	220NF 25V Z

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C811	VE-30000345	CAP EL	10UF 50V M	R433	VE-30000712	RES CF	1/4W 470R J
C812	VE-30000161	CAP MKP	47NF 630Vdc / 622Vpp J	R434	VE-30012657	RES SMD	1/16W 1K J
C814	VE-30000447	CAP CER	4.7NF 4KV M E	R435	VE-30012659	RES SMD	1/16W 2.2K J
C815	VE-30000294	CAP SMD	100NF 50V K	R436	VE-30012674	RES SMD	1/16W 27K J
C816	VE-30013533	CAP CER	100PF 1KV K	R437	VE-30012642	RES SMD	1/16W 120K J
C817	VE-30000431	CAP CER	100PF 1KV M	R457	VE-30012641	RES SMD	1/16W 10K J
C818	VE-30000433	CAP CER	1NF 1KV M B	R460	VE-30012698	RES SMD	1/16W 5.6K J
C819	VE-30000407	CAP EL	470UF 16V M	R469	VE-30012683	RES SMD	1/16W 330K J
C820	VE-30000404	CAP EL	47UF 160V M (HR) 105°	R470	VE-30000670	RES CF	1/4W 330K J
C821	VE-30000294	CAP SMD	100NF 50V K	R474	VE-30000748	RES CF	1/4W 5.6K J
C822	VE-30018416	CAP EL	470UF 16V M 105°	R477	VE-30012662	RES SMD	1/16W 2.7K J
C823	VE-30000352	CAP EL	100UF 16V M	R478	VE-30014022	RES SMD	1/16W 47R J
C824	VE-30000352	CAP EL	100UF 16V M	R479	VE-30012510	RES SMD	1/16W 100R J
C825	VE-30000352	CAP EL	100UF 16V M	R502	VE-30012695	RES SMD	1/16W 470R J
C826	VE-30000092	CAP MKT	220NF 63V J	R503	VE-30012707	RES SMD	1/16W 680R J
C827	VE-30006672	CAP EL	47UF 160V M	R504	VE-30012679	RES SMD	1/16W 3.9K J
C828	VE-30013533	CAP CER	100PF 1KV K	R506	VE-30012506	RES SMD	1/16W 1.5K J
C832	VE-30009208	CAP CER	470PF 1KV K	R507	VE-30012657	RES SMD	1/16W 1K J
C834	VE-30007308	CAP CER	220PF 1KV K	R508	VE-30014022	RES SMD	1/16W 47R J
C837	VE-30009208	CAP CER	470PF 1KV K	R509	VE-30012641	RES SMD	1/16W 10K J
C839	VE-30000294	CAP SMD	100NF 50V K	R510	VE-30012673	RES SMD	1/16W 270R J
C840	VE-30000294	CAP SMD	100NF 50V K	R511	VE-30012508	RES SMD	1/16W 1.8K J
C905	VE-30012568	CAP SMD	270PF 50V J	R512	VE-30000459	RES CF	1/4W 100R J
C907	VE-30012568	CAP SMD	270PF 50V J	R513	VE-30000459	RES CF	1/4W 100R J
C909	VE-30012568	CAP SMD	270PF 50V J	R514	VE-30012657	RES SMD	1/16W 1K J
C910	VE-30000434	CAP CER	1NF 2KV K B	R515	VE-30012692	RES SMD	1/16W 4.7K J
C911	VE-30012579	CAP SMD	82PF 50V J	R516	VE-30012692	RES SMD	1/16W 4.7K J
C912	VE-30012579	CAP SMD	82PF 50V J	R517	VE-30012692	RES SMD	1/16W 4.7K J
C913	VE-30012579	CAP SMD	82PF 50V J	R518	VE-30012659	RES SMD	1/16W 2.2K J
C915	VE-30012567	CAP SMD	220PF 50V J	R519	VE-30012659	RES SMD	1/16W 2.2K J
C916	VE-30012567	CAP SMD	220PF 50V J	R520	VE-30012698	RES SMD	1/16W 5.6K J
C917	VE-30012567	CAP SMD	220PF 50V J	R526	VE-30012657	RES SMD	1/16W 1K J
S102	VE-30012560	CAP SMD	100PF 50V J	R528	VE-30012668	RES SMD	1/16W 220R J
PL101	VE-30000345	CAP EL	10UF 50V M	R529	VE-30000590	RES CF	1/4W 2.2K J
X403	VE-30000074	CAP MKT	100NF 63V J	R530	VE-30012641	RES SMD	1/16W 10K J
				R531	VE-30012698	RES SMD	1/16W 5.6K J
R101	VE-30012509	RES SMD	1/16W 100K J	R533	VE-30012698	RES SMD	1/16W 5.6K J
R102	VE-30012641	RES SMD	1/16W 10K J	R534	VE-30000500	RES CF	1/4W 12K J
R106	VE-30012696	RES SMD	1/16W 47K J	R535	VE-30012506	RES SMD	1/16W 1.5K J
R109	VE-30012641	RES SMD	1/16W 10K J	R537	VE-30000471	RES CF	1/4W 10K J
R110	VE-30012713	RES SMD	1/16W 75R J	R541	VE-30000500	RES CF	1/4W 12K J
R111	VE-30012713	RES SMD	1/16W 75R J	R542	VE-30012508	RES SMD	1/16W 1.8K J
R112	VE-30012696	RES SMD	1/16W 47K J	R546	VE-30012692	RES SMD	1/16W 4.7K J
R113	VE-30012713	RES SMD	1/16W 75R J	R547	VE-30012641	RES SMD	1/16W 10K J
R114	VE-30012692	RES SMD	1/16W 4.7K J	R560	VE-30000525	RES CF	1/2W 1.5K J
R115	VE-30012713	RES SMD	1/16W 75R J	R564	VE-30012641	RES SMD	1/16W 10K J
R117	VE-30012986	RES SMD	1/16W 68R J	R565	VE-30012641	RES SMD	1/16W 10K J
R118	VE-30012713	RES SMD	1/16W 75R J	R566	VE-30012641	RES SMD	1/16W 10K J
R121	VE-30012657	RES SMD	1/16W 1K J	R568	VE-30000459	RES CF	1/4W 100R J
R123	VE-30014128	RES SMD	1/16W 33R J	R601	VE-30000723	RES CF	1/4W 47K J
R125	VE-30012713	RES SMD	1/16W 75R J	R602	VE-30012642	RES SMD	1/16W 120K J
R126	VE-30012695	RES SMD	1/16W 470R J	R603	VE-30012711	RES SMD	1/16W 75K J
R127	VE-30012713	RES SMD	1/16W 75R J	R604	VE-30000718	RES CF	1/4W 4.7K J
R128	VE-30000459	RES CF	1/4W 100R J	R605	VE-30012641	RES SMD	1/16W 10K J
R130	VE-30012641	RES SMD	1/16W 10K J	R607	VE-30015578	RES SMD	1/16W 2.2R J
R131	VE-30012649	RES SMD	1/16W 150R J	R610	VE-30000519	RES CF	1/4W 150R J
R132	VE-30012649	RES SMD	1/16W 150R J	R611	VE-30000650	RES CF	1/4W 33R J
R201	VE-30012674	RES SMD	1/16W 27K J	R612	VE-30012508	RES SMD	1/16W 1.8K J
R203	VE-30000583	RES CF	1/4W 220R J	R613	VE-30000828	RES CF	1/4W 8.2M J
R204	VE-30012692	RES SMD	1/16W 4.7K J	R615	VE-30012510	RES SMD	1/16W 100R J
R206	VE-30000583	RES CF	1/4W 220R J	R617	VE-30012677	RES SMD	1/16W 3.3K J
R401	VE-30014076	RES SMD	1/16W 4.7R J	R618	VE-30000769	RES CF	1/2W 680R J
R402	VE-30014076	RES SMD	1/16W 4.7R J	R619	VE-30000910	RES MF	1/2W 1.8R G
R408	VE-30000466	RES CF	1/4W 1K J	R623	VE-30000869	RES MF	1/4W 12K J
R409	VE-30012510	RES SMD	1/16W 100R J	R624	VE-30000594	RES CF	1/4W 22K J
R410	VE-30012707	RES SMD	1/16W 680R J	R625	VE-30000469	RES SMD	1/10W 1K J
R411	VE-30012657	RES SMD	1/16W 1K J	R628	VE-30014941	RES CF	1/4W 16K J
R412	VE-30012667	RES SMD	1/16W 220K J	R629	VE-30000594	RES CF	1/4W 22K J
R413	VE-30000712	RES CF	1/4W 470R J	R631	VE-30012508	RES SMD	1/16W 1.8K J
R414	VE-30012649	RES SMD	1/16W 150R J	R633	VE-30000564	RES CF	1/4W 18K J
R415	VE-30012683	RES SMD	1/16W 330K J	R635	VE-30012659	RES SMD	1/16W 2.2K J
R416	VE-30012713	RES SMD	1/16W 75R J	△R637	VE-30001225	RES FUSE	1/4W 0.22R J
R417	VE-30012650	RES SMD	1/16W 15K J	R639	VE-30002731	RES SMD	1/10W 68R J
R418	VE-30012510	RES SMD	1/16W 100R J	R640	VE-30002731	RES SMD	1/10W 68R J
R419	VE-30012510	RES SMD	1/16W 100R J	R801	VE-30000983	RES MF	1/4W 4.7K F
R420	VE-30000466	RES CF	1/4W 1K J	R802	VE-30012642	RES SMD	1/16W 120K J
R421	VE-30012674	RES SMD	1/16W 27K J	R803	VE-30007207	RES SMD	1/10W 22K F
R422	VE-30012662	RES SMD	1/16W 2.7K J	R804	VE-30000466	RES CF	1/4W 1K J
R423	VE-30012714	RES SMD	1/16W 820R J	R805	VE-30000466	RES CF	1/4W 1K J
R424	VE-30012714	RES SMD	1/16W 820R J	R807	VE-30001157	RES MO	1W 330K J
R425	VE-30012714	RES SMD	1/16W 820R J	R808	VE-30000452	RES CF	1/4W 10R J
R426	VE-30000718	RES CF	1/4W 4.7K J	R809	VE-30001183	RES MO	2W 56K J
R427	VE-30012657	RES SMD	1/16W 1K J	R810	VE-30017136	RES MO	1W 0.56R J
R428	VE-30012696	RES SMD	1/16W 47K J	△R811	VE-30001257	RES MG	1/2W 4.7M J
R429	VE-30000466	RES CF	1/4W 1K J	R813	VE-30000470	RES CF	1/2W 10K J
R430	VE-30000466	RES CF	1/4W 1K J	R814	VE-30000649	RES CF	1/2W 33R J
R431	VE-30000466	RES CF	1/4W 1K J	R815	VE-30000524	RES SMD	1/10W 150R J

△Ref No.	Part No.	Part Name	Description Local
R816	VE-30000470	RES CF	1/2W 10K J
R817	VE-30000594	RES CF	1/4W 22K J
R820	VE-30000469	RES SMD	1/10W 1K J
△R821	VE-30001229	RES FUSE	1W 2.2R J
R828	VE-30001185	RES MO	2W 5.6R J
R829	VE-30012714	RES SMD	1/16W 820R J
△R830	VE-30001245	RES FUSE	1/4W 0.47R J
R831	VE-30012677	RES SMD	1/16W 3.3K J
△R832	VE-30018085	CAP VAR	510V K
R901	VE-30012688	RES SMD	1/16W 390R J
R901	VE-30012688	RES SMD	1/16W 390R J
R902	VE-30012688	RES SMD	1/16W 390R J
R902	VE-30012688	RES SMD	1/16W 390R J
R903	VE-30012688	RES SMD	1/16W 390R J
R903	VE-30012688	RES SMD	1/16W 390R J
R904	VE-30012508	RES SMD	1/16W 1.8K J
R905	VE-30012508	RES SMD	1/16W 1.8K J
R906	VE-30012508	RES SMD	1/16W 1.8K J
R907	VE-30014022	RES SMD	1/16W 47R J
R908	VE-30014022	RES SMD	1/16W 47R J
R909	VE-30014022	RES SMD	1/16W 47R J
R910	VE-30012695	RES SMD	1/16W 470R J
R911	VE-30012695	RES SMD	1/16W 470R J
R912	VE-30012695	RES SMD	1/16W 470R J
R913	VE-30001116	RES MO	2W 18K J
R914	VE-30001116	RES MO	2W 18K J
R915	VE-30001116	RES MO	2W 18K J
R916	VE-30000459	RES CF	1/4W 100R J
R917	VE-30012510	RES SMD	1/16W 100R J
R918	VE-30012510	RES SMD	1/16W 100R J
R919	VE-30000526	RES CF	1/4W 1.5K J
R920	VE-30000526	RES CF	1/4W 1.5K J
R921	VE-30000526	RES CF	1/4W 1.5K J
J142	VE-30000461	RES CF	1/6W 100R J
L104	VE-30001734	JUMPER SMD	
L201	VE-30001992	FIXED COIL	10UH
L204	VE-30001984	FIXED COIL	2.2UH
L402	VE-30001992	FIXED COIL	10UH
L403	VE-30001990	FIXED COIL	6.8UH
L404	VE-30001987	FIXED COIL	4.7UH
L407	VE-30001992	FIXED COIL	10UH
L410	VE-30001992	FIXED COIL	10UH
L601	VE-30001990	FIXED COIL	6.8UH
L803	VE-30001984	FIXED COIL	2.2UH
L806	VE-30002011	FIXED COIL	150UH
L811	VE-30001990	FIXED COIL	6.8UH
J128	VE-30002002	FIXED COIL	47UH
J168	VE-30001992	FIXED COIL	10UH
△TR601	VE-30017788	TRF FBT	
△TR801	VE-30015302	TRF SMPS	
△F801	VE-30001731	FUSE	2.5A
L101	VE-30001971	FERRITE SMD	
L103	VE-30001971	FERRITE SMD	
L105	VE-30001971	FERRITE SMD	
L106	VE-30001971	FERRITE SMD	
L406	VE-30001971	FERRITE SMD	
△L801	VE-30002100	LINE FILTER	
L802	VE-30001971	FERRITE SMD	
L804	VE-30001971	FERRITE SMD	
L805	VE-30001971	FERRITE SMD	
PL102	VE-30015053	SOCKET SCART	
SW501	VE-30015988	SWITCH TACT	
SW502	VE-30015988	SWITCH TACT	
SW503	VE-30015988	SWITCH TACT	
SW504	VE-30015988	SWITCH TACT	
△SW801	VE-30017848	SWITCH ON/OFF	
△TH800	VE-30001270	PTC	9 OHM
TU201	VE-30009637	TUNER WSP (PLL)	
VL405	VE-30026042	ADJ.COIL	
X401	VE-30001749	XTAL	
X402	VE-30015592	XTAL	
X501	VE-30002851	XTAL	
Z401	VE-30001728	TRIPLE TRAP	
Z403	VE-30012544	FILTER SAW	

FRONT AV JACK P.W. BOARD ASS'Y (VE-20124552)

△Ref No.	Part No.	Part Name	Description Local
JK1003	VE-30001882	RCA JACK	1P WHITE
JK1002	VE-30001884	RCA JACK	1P YELLOW
L1001	VE-30006712	FERRITE BEAD	
L1002	VE-30006712	FERRITE BEAD	

HEADPHONE JACK P.W. BOARD ASS'Y (VE-20170438)

△Ref No.	Part No.	Part Name	Description Local
D100	VE-30001350	DIODE ZENER	12V
D101	VE-30001350	DIODE ZENER	12V
C100	VE-30000330	CAP CER	4.7NF 50V K B
C101	VE-30000330	CAP CER	4.7NF 50V K B
R100	VE-30000519	RES CF	1/4W 150R J
R101	VE-30000519	RES CF	1/4W 150R J
R102	VE-30000712	RES CF	1/4W 470R J
R103	VE-30000712	RES CF	1/4W 470R J
JK100	VE-30001900	JACK HEADPHONE	HP01

PRINTED WIRING BOARD PARTS LIST [AV-14RM4SN]

MAIN P.W. BOARD ASS'Y (VE-20159381)

△Ref No.	Part No.	Part Name	Description	Local
IC403	VE-30026920	IC		
IC404	VE-30001612	IC		
IC500	VE-20109896	IC (MEMORY)		
IC501	VE-20093790	IC (MICOM)		
IC502	VE-30001670	PREAMPLIFIER		
△IC600	VE-30015306	IC		
IC810	VE-20079043	IC		
IC841	VE-30001627	IC		
IC842	VE-30001622	IC		
Q101	VE-30001457	TRANSISTOR		
Q102	VE-30001457	TRANSISTOR		
Q103	VE-30001457	TRANSISTOR		
Q104	VE-30001457	TRANSISTOR		
Q458	VE-30001457	TRANSISTOR		
Q459	VE-30001457	TRANSISTOR		
Q501	VE-30001458	TRANSISTOR		
Q601	VE-30013656	TRANSISTOR POWER		
Q602	VE-20090846	TRANSISTOR		
Q603	VE-30001457	TRANSISTOR		
Q801	VE-30001385	TRANSISTOR		
Q803	VE-30001457	TRANSISTOR		
Q805	VE-30014346	IC		
Q901	VE-30001461	TRANSISTOR		
Q902	VE-30001461	TRANSISTOR		
Q903	VE-30001461	TRANSISTOR		
Q904	VE-30001426	TRANSISTOR		
Q905	VE-30001426	TRANSISTOR		
Q906	VE-30001426	TRANSISTOR		
D101	VE-30007763	DIODE ZENER SMD		
D108	VE-30009699	DIODE ZENER		
D109	VE-30007763	DIODE ZENER SMD		
D110	VE-30007763	DIODE ZENER SMD		
D111	VE-30003720	DIODE ZENER		
D402	VE-30007763	DIODE ZENER SMD		
D406	VE-30001285	DIODE		
D407	VE-30001285	DIODE		
D410	VE-30018576	DIODE ZENER		
D411	VE-30018576	DIODE ZENER		
D412	VE-30018576	DIODE ZENER		
D413	VE-30009699	DIODE ZENER		
D414	VE-30009699	DIODE ZENER		
D501	VE-30001285	DIODE		
D502	VE-30007761	DIODE ZENER SMD		
D503	VE-30001284	DIODE		
D504	VE-30001284	DIODE		
D505	VE-30001377	DIODE ZENER		
D509	VE-30001279	LED RED/GREEN		
D601	VE-30001329	DIODE		
D602	VE-30001285	DIODE		
D604	VE-30001318	DIODE		
D605	VE-30001318	DIODE		
D606	VE-30001318	DIODE		
D609	VE-30001284	DIODE		
D610	VE-30009699	DIODE ZENER		
D801	VE-30001285	DIODE		
D802	VE-30001318	DIODE		
D803	VE-30001331	DIODE		
D804	VE-30001288	DIODE		
D805	VE-30001301	DIODE		
D806	VE-30001288	DIODE		
△D811	VE-30001318	DIODE		
D839	VE-30007763	DIODE ZENER SMD		
D901	VE-30001285	DIODE		
D902	VE-30001285	DIODE		
D903	VE-30001285	DIODE		
C103	VE-30000371	CAP EL	22UF 50V M	
C104	VE-30012589	CAP SMD	4.7NF 50V K	
C105	VE-30016654	CAP SMD	100NF 16V K R	
C106	VE-30012589	CAP SMD	4.7NF 50V K	
C108	VE-30012589	CAP SMD	4.7NF 50V K	
C201	VE-30000400	CAP EL	47UF 50V M	
C206	VE-30000371	CAP EL	22UF 50V M	
C207	VE-30012610	CAP SMD	10NF 50V J	
C208	VE-30012610	CAP SMD	10NF 50V J	
C401	VE-30000345	CAP EL	10UF 50V M	
C402	VE-30000289	CAP SMD	10NF 50V K R	
C403	VE-30012610	CAP SMD	10NF 50V J	
C404	VE-30016654	CAP SMD	100NF 16V K R	
C405	VE-30016654	CAP SMD	100NF 16V K R	
C408	VE-30000074	CAP MKT	100NF 63V J	
C409	VE-30000384	CAP EL	2.2UF 50V M	
C410	VE-30000109	CAP MKT	470NF 63V J	
C411	VE-30000074	CAP MKT	100NF 63V J	
C413	VE-30016654	CAP SMD	100NF 16V K R	
C415	VE-30000362	CAP EL	1UF 50V M.	
C416	VE-30012586	CAP SMD	22NF 50V K	
C417	VE-30000362	CAP EL	1UF 50V M.	
C418	VE-30000362	CAP EL	1UF 50V M.	
C419	VE-30000074	CAP MKT	100NF 63V J	
C420	VE-30000345	CAP EL	10UF 50V M	
C421	VE-30012581	CAP SMD	1NF 50V K R	
C422	VE-30000100	CAP MKT	330NF 63V J	
C423	VE-30012586	CAP SMD	22NF 50V K	
C424	VE-30000109	CAP MKT	470NF 63V J	
C425	VE-30000074	CAP MKT	100NF 63V J	
C427	VE-30000362	CAP EL	1UF 50V M.	
C428	VE-30000362	CAP EL	1UF 50V M.	
C429	VE-30012586	CAP SMD	22NF 50V K	
C431	VE-30016654	CAP SMD	100NF 16V K R	
C432	VE-30016654	CAP SMD	100NF 16V K R	
C434	VE-30012586	CAP SMD	22NF 50V K	
C435	VE-30012585	CAP SMD	2.2NF 50V K R	
C436	VE-30007082	CAP MKT	680NF 63V J	
C438	VE-30000384	CAP EL	2.2UF 50V M	
C440	VE-30012589	CAP SMD	4.7NF 50V K	
C442	VE-30000362	CAP EL	1UF 50V M	
C443	VE-30000345	CAP EL	10UF 50V M	
C458	VE-30012567	CAP SMD	220PF 50V J	
C459	VE-30000345	CAP EL	10UF 50V M	
C460	VE-30000371	CAP EL	22UF 50V M	
C464	VE-30012610	CAP SMD	10NF 50V J	
C465	VE-30012575	CAP SMD	4.7PF 50V C CH	
C468	VE-30012574	CAP SMD	470PF 50V J	
C501	VE-30000074	CAP MKT	100NF 63V J	
C502	VE-30000396	CAP EL	47UF 16V M.	
C503	VE-30012603	CAP SMD	100NF 25V K R	
C504	VE-30012589	CAP SMD	4.7NF 50V K	
C508	VE-30012586	CAP SMD	22NF 50V K	
C509	VE-30012566	CAP SMD	22PF 50V J	
C511	VE-30000371	CAP EL	22UF 50V M	
C513	VE-30012579	CAP SMD	82PF 50V J	
C514	VE-30000100	CAP MKT	330NF 63V J	
C515	VE-30012586	CAP SMD	22NF 50V K	
C518	VE-30012560	CAP SMD	100PF 50V J	
C519	VE-30012562	CAP SMD	15PF 50V J	
C520	VE-30012562	CAP SMD	15PF 50V J	
C521	VE-30012585	CAP SMD	2.2NF 50V K R	
C523	VE-30012566	CAP SMD	22PF 50V J	
C526	VE-30012589	CAP SMD	4.7NF 50V K	
C534	VE-30000431	CAP CER	100PF 1KV M	
C535	VE-30006753	CAP CER	220PF 1KV K B	
C536	VE-30012607	CAP SMD	150PF 50V J	
C538	VE-30012560	CAP SMD	100PF 50V J	
C539	VE-30000400	CAP EL	47UF 50V M	
C540	VE-30000315	CAP SMD	220NF 25V Z	
C541	VE-30012590	CAP SMD	47NF 50V K	
C542	VE-30010571	CAP EL	10UF 16V M	
C602	VE-30000107	CAP MKT	47NF 250V J	
C603	VE-30000100	CAP MKT	330NF 63V J	
C604	VE-30018416	CAP EL	470UF 16V M 105°	
C605	VE-30000354	CAP EL	100UF 35V M	
C606	VE-30000092	CAP MKT	220NF 63V J	
C607	VE-30016085	CAP EL	10UF 63V 105°	
C609	VE-30000371	CAP EL	22UF 50V M	
C610	VE-30000360	CAP EL	1000UF 25V M	
△C611	VE-30000179	CAP MKP	9.1NF 1600Vdc/ 1250Vpp %3.5	
C613	VE-30000350	CAP EL	10UF 250V M	
△C616	VE-30000156	CAP MKP	430NF 250V J	
C617	VE-30007750	CAP EL	470UF 35V	
C618	VE-30000092	CAP MKT	220NF 63V J	
C619	VE-30000384	CAP EL	2.2UF 50V M	
C643	VE-30000394	CAP EL	3.3UF 160V M	
C644	VE-30000345	CAP EL	10UF 50V M	
C646	VE-30012581	CAP SMD	1NF 50V K R	
C647	VE-30000116	CAP MKT	68NF 63V J	
C648	VE-30012609	CAP SMD	68NF 50V K	
C649	VE-30012573	CAP SMD	47PF 50V J	
C650	VE-30000294	CAP SMD	100NF 50V K	
△C801	VE-30000094	CAP MKT	220NF 275V M AC	
△C802	VE-30000084	CAP MKT	150NF 275V M AC P=15	
C805	VE-30012585	CAP SMD	2.2NF 50V K R	
C806	VE-30012574	CAP SMD	470PF 50V J	

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C807	VE-30000090	CAP MKT	22NF 100V J	R429	VE-30000466	RES CF	1/4W 1K J
C808	VE-30000418	CAP EL	100UF 400V M	R430	VE-30000466	RES CF	1/4W 1K J
C810	VE-30000315	CAP SMD	220NF 25V Z	R431	VE-30000466	RES CF	1/4W 1K J
C811	VE-30000345	CAP EL	10UF 50V M	R433	VE-30000712	RES CF	1/4W 470R J
C812	VE-30000161	CAP MKP	47NF 630Vdc / 622Vpp J	R434	VE-30012657	RES SMD	1/16W 1K J
C814	VE-30000447	CAP CER	4.7NF 4KV M E	R435	VE-30012659	RES SMD	1/16W 2.2K J
C815	VE-30000294	CAP SMD	100NF 50V K	R436	VE-30012674	RES SMD	1/16W 27K J
C816	VE-30013533	CAP CER	100PF 1KV K	R437	VE-30012642	RES SMD	1/16W 120K J
C817	VE-30000431	CAP CER	100PF 1KV M	R457	VE-30012641	RES SMD	1/16W 10K J
C818	VE-30000433	CAP CER	1NF 1KV M B	R460	VE-30012698	RES SMD	1/16W 5.6K J
C819	VE-30000407	CAP EL	470UF 16V M.	R469	VE-30012683	RES SMD	1/16W 330K J
C820	VE-30000404	CAP EL	47UF 160V M (HR) 105°	R470	VE-30000670	RES CF	1/4W 330K J
C821	VE-30000294	CAP SMD	100NF 50V K	R474	VE-30000748	RES CF	1/4W 5.6K J
C822	VE-30018416	CAP EL	470UF 16V M 105°	R477	VE-30012662	RES SMD	1/16W 2.7K J
C823	VE-30000352	CAP EL	100UF 16V M	R478	VE-30014022	RES SMD	1/16W 47R J
C824	VE-30000352	CAP EL	100UF 16V M	R479	VE-30012510	RES SMD	1/16W 100R J
C825	VE-30000352	CAP EL	100UF 16V M	R502	VE-30012695	RES SMD	1/16W 470R J
C826	VE-30000092	CAP MKT	220NF 63V J	R503	VE-30012707	RES SMD	1/16W 680R J
C827	VE-30006672	CAP EL	47UF 160V M	R504	VE-30012679	RES SMD	1/16W 3.9K J
C828	VE-30013533	CAP CER	100PF 1KV K	R506	VE-30012506	RES SMD	1/16W 1.5K J
C832	VE-30009208	CAP CER	470PF 1KV K	R507	VE-30012657	RES SMD	1/16W 1K J
C834	VE-30007308	CAP CER	220PF 1KV K	R508	VE-30014022	RES SMD	1/16W 47R J
C837	VE-30009208	CAP CER	470PF 1KV K	R509	VE-30012641	RES SMD	1/16W 10K J
C839	VE-30000294	CAP SMD	100NF 50V K	R510	VE-30012673	RES SMD	1/16W 270R J
C840	VE-30000294	CAP SMD	100NF 50V K	R511	VE-30012508	RES SMD	1/16W 1.8K J
C905	VE-30012568	CAP SMD	270PF 50V J	R512	VE-30000459	RES CF	1/4W 100R J
C907	VE-30012568	CAP SMD	270PF 50V J	R513	VE-30000459	RES CF	1/4W 100R J
C909	VE-30012568	CAP SMD	270PF 50V J	R514	VE-30012657	RES SMD	1/16W 1K J
C910	VE-30000434	CAP CER	1NF 2KV K B	R515	VE-30012692	RES SMD	1/16W 4.7K J
C911	VE-30012579	CAP SMD	82PF 50V J	R516	VE-30012692	RES SMD	1/16W 4.7K J
C912	VE-30012579	CAP SMD	82PF 50V J	R517	VE-30012692	RES SMD	1/16W 4.7K J
C913	VE-30012579	CAP SMD	82PF 50V J	R518	VE-30012659	RES SMD	1/16W 2.2K J
C915	VE-30012567	CAP SMD	220PF 50V J	R519	VE-30012659	RES SMD	1/16W 2.2K J
C916	VE-30012567	CAP SMD	220PF 50V J	R520	VE-30012698	RES SMD	1/16W 5.6K J
C917	VE-30012567	CAP SMD	220PF 50V J	R526	VE-30012657	RES SMD	1/16W 1K J
SL101	VE-30000345	CAP EL	10UF 50V M	R528	VE-30012668	RES SMD	1/16W 220R J
S102	VE-30012560	CAP SMD	100PF 50V J	R529	VE-30000590	RES CF	1/4W 2.2K J
X403	VE-30000074	CAP MKT	100NF 63V J	R530	VE-30012641	RES SMD	1/16W 10K J
				R531	VE-30012698	RES SMD	1/16W 5.6K J
R101	VE-30012509	RES SMD	1/16W 100K J	R533	VE-30012698	RES SMD	1/16W 5.6K J
R102	VE-30012641	RES SMD	1/16W 10K J	R534	VE-30000500	RES CF	1/4W 12K J
R106	VE-30012696	RES SMD	1/16W 47K J	R535	VE-30012506	RES SMD	1/16W 1.5K J
R109	VE-30012641	RES SMD	1/16W 10K J	R537	VE-30000471	RES CF	1/4W 10K J
R110	VE-30012713	RES SMD	1/16W 75R J	R541	VE-30000500	RES CF	1/4W 12K J
R111	VE-30012713	RES SMD	1/16W 75R J	R542	VE-30012508	RES SMD	1/16W 1.8K J
R112	VE-30012696	RES SMD	1/16W 47K J	R546	VE-30012692	RES SMD	1/16W 4.7K J
R113	VE-30012713	RES SMD	1/16W 75R J	R547	VE-30012641	RES SMD	1/16W 10K J
R114	VE-30012692	RES SMD	1/16W 4.7K J	R560	VE-30000525	RES CF	1/2W 1.5K J
R115	VE-30012713	RES SMD	1/16W 75R J	R564	VE-30012641	RES SMD	1/16W 10K J
R117	VE-30012986	RES SMD	1/16W 68R J	R565	VE-30012641	RES SMD	1/16W 10K J
R118	VE-30012713	RES SMD	1/16W 75R J	R566	VE-30012641	RES SMD	1/16W 10K J
R121	VE-30012657	RES SMD	1/16W 1K J	R568	VE-30000459	RES CF	1/4W 100R J
R123	VE-30014128	RES SMD	1/16W 33R J	R601	VE-30000723	RES CF	1/4W 47K J
R125	VE-30012713	RES SMD	1/16W 75R J	R602	VE-30012642	RES SMD	1/16W 120K J
R126	VE-30012695	RES SMD	1/16W 470R J	R603	VE-30012711	RES SMD	1/16W 75K J
R127	VE-30012713	RES SMD	1/16W 75R J	R604	VE-30000718	RES CF	1/4W 4.7K J
R128	VE-30000459	RES CF	1/4W 100R J	R605	VE-30012641	RES SMD	1/16W 10K J
R130	VE-30012641	RES SMD	1/16W 10K J	R607	VE-30015578	RES SMD	1/16W 2.2R J
R131	VE-30012649	RES SMD	1/16W 150R J	R609	VE-30001145	RES MO	1W 33R J
R132	VE-30012649	RES SMD	1/16W 150R J	R610	VE-30000519	RES CF	1/4W 150R J
R201	VE-30012674	RES SMD	1/16W 27K J	R611	VE-30000650	RES CF	1/4W 33R J
R203	VE-30000583	RES CF	1/4W 220R J	R612	VE-30012508	RES SMD	1/16W 1.8K J
R204	VE-30012692	RES SMD	1/16W 4.7K J	R613	VE-30000828	RES CF	1/4W 8.2M J
R206	VE-30000583	RES CF	1/4W 220R J	R615	VE-30012510	RES SMD	1/16W 100R J
R401	VE-30014076	RES SMD	1/16W 4.7R J	R616	VE-30001145	RES MO	1W 33R J
R402	VE-30014076	RES SMD	1/16W 4.7R J	R617	VE-30012677	RES SMD	1/16W 3.3K J
R408	VE-30000466	RES CF	1/4W 1K J	R618	VE-30000769	RES CF	1/2W 680R J
R409	VE-30012510	RES SMD	1/16W 100R J	R619	VE-30000910	RES MF	1/2W 1.8R G
R410	VE-30012707	RES SMD	1/16W 680R J	R623	VE-30000869	RES MF	1/4W 12K J
R411	VE-30012657	RES SMD	1/16W 1K J	R624	VE-30000594	RES CF	1/4W 22K J
R412	VE-30012667	RES SMD	1/16W 220K J	R625	VE-30000469	RES SMD	1/10W 1K J
R413	VE-30000712	RES CF	1/4W 470R J	△R626	VE-30001215	RES FUSE	1W 1R J
R414	VE-30012649	RES SMD	1/16W 150R J	R627	VE-30000718	RES CF	1/4W 4.7K J
R415	VE-30012683	RES SMD	1/16W 330K J	R628	VE-30014941	RES CF	1/4W 16K J
R416	VE-30012713	RES SMD	1/16W 75R J	R629	VE-30000594	RES CF	1/4W 22K J
R417	VE-30012650	RES SMD	1/16W 15K J	R631	VE-30012508	RES SMD	1/16W 1.8K J
R418	VE-30012510	RES SMD	1/16W 100R J	R633	VE-30000564	RES CF	1/4W 18K J
R419	VE-30012510	RES SMD	1/16W 100R J	R635	VE-30012659	RES SMD	1/16W 2.2K J
R420	VE-30000466	RES CF	1/4W 1K J	R636	VE-30006757	RES MO	1W 560R J
R421	VE-30012674	RES SMD	1/16W 27K J	△R637	VE-30001225	RES FUSE	1/4W 0.22R J
R422	VE-30012662	RES SMD	1/16W 2.7K J	R638	VE-30006757	RES MO	1W 560R J
R423	VE-30012714	RES SMD	1/16W 820R J	R639	VE-30002731	RES SMD	1/10W 68R J
R424	VE-30012714	RES SMD	1/16W 820R J	R640	VE-30002731	RES SMD	1/10W 68R J
R425	VE-30012714	RES SMD	1/16W 820R J	R801	VE-30000983	RES MF	1/4W 4.7K F
R426	VE-30000718	RES CF	1/4W 4.7K J	R802	VE-30012642	RES SMD	1/16W 120K J
R427	VE-30012657	RES SMD	1/16W 1K J	R803	VE-30007207	RES SMD	1/10W 22K F
R428	VE-30012696	RES SMD	1/16W 47K J	R804	VE-30000466	RES CF	1/4W 1K J

△Ref No.	Part No.	Part Name	Description Local
R805	VE-30000466	RES CF	1/4W 1K J
R807	VE-30001157	RES MO	1W 330K J
R808	VE-30000452	RES CF	1/4W 10R J
R809	VE-30001183	RES MO	2W 56K J
R810	VE-30017136	RES MO	1W 0.56R J
△R811	VE-30001257	RES MG	1/2W 4.7M J
R813	VE-30000470	RES CF	1/2W 10K J
R814	VE-30000649	RES CF	1/2W 33R J
R815	VE-30000524	RES SMD	1/10W 150R J
R816	VE-30000470	RES CF	1/2W 10K J
R817	VE-30000594	RES CF	1/4W 22K J
R820	VE-30000469	RES SMD	1/10W 1K J
△R821	VE-30001229	RES FUSE	1W 2.2R J
R828	VE-30001185	RES MO	2W 5.6R J
R829	VE-30012714	RES SMD	1/16W 820R J
△R830	VE-30001245	RES FUSE	1/4W 0.47R J
R831	VE-30012677	RES SMD	1/16W 3.3K J
△R832	VE-30018085	CAP VAR	510V K
R901	VE-30012688	RES SMD	1/16W 390R J
R902	VE-30012688	RES SMD	1/16W 390R J
R903	VE-30012688	RES SMD	1/16W 390R J
R904	VE-30012508	RES SMD	1/16W 1.8K J
R905	VE-30012508	RES SMD	1/16W 1.8K J
R906	VE-30012508	RES SMD	1/16W 1.8K J
R907	VE-30014022	RES SMD	1/16W 47R J
R908	VE-30014022	RES SMD	1/16W 47R J
R909	VE-30014022	RES SMD	1/16W 47R J
R910	VE-30012695	RES SMD	1/16W 470R J
R911	VE-30012695	RES SMD	1/16W 470R J
R912	VE-30012695	RES SMD	1/16W 470R J
R913	VE-30001116	RES MO	2W 18K J
R914	VE-30001116	RES MO	2W 18K J
R915	VE-30001116	RES MO	2W 18K J
R916	VE-30000459	RES CF	1/4W 100R J
R917	VE-30012510	RES SMD	1/16W 100R J
R918	VE-30012510	RES SMD	1/16W 100R J
R919	VE-30000526	RES CF	1/4W 1.5K J
R920	VE-30000526	RES CF	1/4W 1.5K J
R921	VE-30000526	RES CF	1/4W 1.5K J
J142	VE-30000461	RES CF	1/6W 100R J
L101	VE-30001971	FERRITE SMD	
L103	VE-30001971	FERRITE SMD	
L104	VE-30001734	JUMPER SMD	
L105	VE-30001971	FERRITE SMD	
L106	VE-30001971	FERRITE SMD	
L201	VE-30001992	FIXED COIL	10UH
L204	VE-30001984	FIXED COIL	2.2UH
L402	VE-30001992	FIXED COIL	10UH
L403	VE-30001990	FIXED COIL	6.8UH
L404	VE-30001987	FIXED COIL	4.7UH
L406	VE-30001971	FERRITE SMD	
L407	VE-30001992	FIXED COIL	10UH
L410	VE-30001992	FIXED COIL	10UH
L601	VE-30001990	FIXED COIL	6.8UH
L802	VE-30001971	FERRITE SMD	
L803	VE-30001984	FIXED COIL	2.2UH
L804	VE-30001971	FERRITE SMD	
L805	VE-30001971	FERRITE SMD	
L806	VE-30002011	FIXED COIL	150UH
L811	VE-30001990	FIXED COIL	6.8UH
J128	VE-30002002	FIXED COIL	47UH
J168	VE-30001992	FIXED COIL	10UH
△TR601	VE-30017788	TRF FBT	
△TR801	VE-30015302	TRF SMPS	(170-270V)
△F801	VE-30001731	FUSE	2.5A 250V
△L801	VE-30002100	LINE FILTER	
LX810	VE-30010964	FERRITE SMD	
PL102	VE-30015053	SOCKET SCART	
△PL902	VE-30001860	SOCKET CRT	
SW501	VE-30015988	SWITCH TACT	
SW502	VE-30015988	SWITCH TACT	
SW503	VE-30015988	SWITCH TACT	
SW504	VE-30015988	SWITCH TACT	
△SW801	VE-30017848	SWITCH ON/OFF	
△TH800	VE-30001270	PTC	9 OHM
TU201	VE-30009637	TUNER WSP (PLL)	
VL405	VE-30026042	ADJ.COIL	
X401	VE-30001749	XTAL	
X402	VE-30015592	XTAL	
X501	VE-30002851	XTAL	
Z401	VE-30018329	FILTER SER TRAP	5.5MHZ
Z403	VE-30012622	FILTER SAW	

FRONT AV JACK P.W. BOARD ASS'Y (VE-20124552)

REFER TO PARTS LIST IN PAGE 3-6 FOR THIS P.W. BOARD.

HEADPHONE JACK P.W. BOARD ASS'Y (VE-20170438)

REFER TO PARTS LIST IN PAGE 3-6 FOR THIS P.W. BOARD.

PRINTED WIRING BOARD PARTS LIST [AV-14RM4SP]

MAIN P.W. BOARD ASS'Y (VE-20159384)

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
IC403	VE-30026922	IC		C208	VE-30012610	CAP SMD	10NF 50V J
IC404	VE-30001612	IC		C401	VE-30000345	CAP EL	10UF 50V M
IC500	VE-20109888	IC(MEMORY)		C402	VE-30000289	CAP SMD	10NF 50V K R
IC501	VE-20093790	IC(MICOM)		C403	VE-30012610	CAP SMD	10NF 50V J
IC502	VE-30001670	PREAMPLIFIER		C404	VE-30016654	CAP SMD	100NF 16V K R
△IC600	VE-30015306	IC		C405	VE-30016654	CAP SMD	100NF 16V K R
IC810	VE-20079043	IC		C408	VE-30000074	CAP MKT	100NF 63V J
IC841	VE-30001627	IC		C409	VE-30000384	CAP EL	2.2UF 50V M
IC842	VE-30001622	IC		C410	VE-30000109	CAP MKT	470NF 63V J
				C411	VE-30000074	CAP MKT	100NF 63V J
				C413	VE-30016654	CAP SMD	100NF 16V K R
				C415	VE-30000362	CAP EL	1UF 50V M
				C416	VE-30012586	CAP SMD	22NF 50V K
				C417	VE-30000362	CAP EL	1UF 50V M
				C418	VE-30000362	CAP EL	1UF 50V M
				C419	VE-30000074	CAP MKT	100NF 63V J
				C420	VE-30000345	CAP EL	10UF 50V M
				C421	VE-30012581	CAP SMD	1NF 50V K R
				C422	VE-30000100	CAP MKT	330NF 63V J
				C423	VE-30012586	CAP SMD	22NF 50V K
				C424	VE-30000109	CAP MKT	470NF 63V J
				C425	VE-30000074	CAP MKT	100NF 63V J
				C427	VE-30000362	CAP EL	1UF 50V M
				C428	VE-30000362	CAP EL	1UF 50V M
				C429	VE-30012586	CAP SMD	22NF 50V K
				C431	VE-30016654	CAP SMD	100NF 16V K R
				C432	VE-30016654	CAP SMD	100NF 16V K R
				C434	VE-30012586	CAP SMD	22NF 50V K
				C435	VE-30012585	CAP SMD	2.2NF 50V K R
				C436	VE-30007082	CAP MKT	680NF 63V J
				C438	VE-30000384	CAP EL	2.2UF 50V M
				C440	VE-30012589	CAP SMD	4.7NF 50V K
				C442	VE-30000362	CAP EL	1UF 50V M
				C443	VE-30000345	CAP EL	10UF 50V M
				C451	VE-30012567	CAP SMD	220PF 50V J
				C458	VE-30012567	CAP SMD	220PF 50V J
				C459	VE-30000345	CAP EL	10UF 50V M
				C460	VE-30000371	CAP EL	22UF 50V M
				C464	VE-30012610	CAP SMD	10NF 50V J
				C465	VE-30012575	CAP SMD	4.7PF 50V C CH
				C468	VE-30012574	CAP SMD	470PF 50V J
				C501	VE-30000074	CAP MKT	100NF 63V J
				C502	VE-30000396	CAP EL	47UF 16V M
				C503	VE-30012603	CAP SMD	100NF 25V K R
				C504	VE-30012589	CAP SMD	4.7NF 50V K
				C508	VE-30012586	CAP SMD	22NF 50V K
				C509	VE-30012566	CAP SMD	22PF 50V J
				C511	VE-30000371	CAP EL	22UF 50V M
				C513	VE-30012579	CAP SMD	82PF 50V J
				C514	VE-30000100	CAP MKT	330NF 63V J
				C515	VE-30012586	CAP SMD	22NF 50V K
				C518	VE-30012560	CAP SMD	100PF 50V J
				C519	VE-30012562	CAP SMD	15PF 50V J
				C520	VE-30012562	CAP SMD	15PF 50V J
				C521	VE-30012585	CAP SMD	2.2NF 50V K R
				C523	VE-30012566	CAP SMD	22PF 50V J
				C526	VE-30012589	CAP SMD	4.7NF 50V K
				C534	VE-30000431	CAP CER	100PF 1KV M
				C535	VE-30006753	CAP CER	220PF 1KV K B
				C536	VE-30012607	CAP SMD	150PF 50V J
				C538	VE-30012560	CAP SMD	100PF 50V J
				C539	VE-30000400	CAP EL	47UF 50V M
				C540	VE-30000315	CAP SMD	220NF 25V Z
				C541	VE-30012590	CAP SMD	47NF 50V K
				C542	VE-30010571	CAP EL	10UF 16V M
				C602	VE-30000107	CAP MKT	47NF 250V J
				C603	VE-30000100	CAP MKT	330NF 63V J
				C604	VE-30018416	CAP EL	470UF 16V M 105°
				C605	VE-30000354	CAP EL	100UF 35V M
				C606	VE-30000092	CAP MKT	220NF 63V J
				C607	VE-30016085	CAP EL	10UF 63V 105°
				C609	VE-30000371	CAP EL	22UF 50V M
				C610	VE-30000360	CAP EL	1000UF 25V M
				△C611	VE-30000179	CAP MKP	9.1NF 1600Vdc1250Vpp %3.5
				C613	VE-30000350	CAP EL	10UF 250V M
				C616	VE-30000156	CAP MKP	430NF 250V J
				C617	VE-30007750	CAP EL	470UF 35V
				C618	VE-30000092	CAP MKT	220NF 63V J
				C619	VE-30000384	CAP EL	2.2UF 50V M
				C643	VE-30000394	CAP EL	3.3UF 160V M
				C644	VE-30000345	CAP EL	10UF 50V M
				C646	VE-30012581	CAP SMD	1NF 50V K R
				C647	VE-30000116	CAP MKT	68NF 63V J
				C648	VE-30012609	CAP SMD	68NF 50V K
C103	VE-30000371	CAP EL	22UF 50V M				
C104	VE-30012589	CAP SMD	4.7NF 50V K				
C105	VE-30016654	CAP SMD	100NF 16V K R				
C106	VE-30012589	CAP SMD	4.7NF 50V K				
C108	VE-30012589	CAP SMD	4.7NF 50V K				
C201	VE-30000400	CAP EL	47UF 50V M				
C206	VE-30000371	CAP EL	22UF 50V M				
C207	VE-30012610	CAP SMD	10NF 50V J				

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C649	VE-30012573	CAP SMD	47PF 50V J	R423	VE-30012714	RES SMD	1/16W 820R J
C650	VE-30000294	CAP SMD	100NF 50V K	R424	VE-30012714	RES SMD	1/16W 820R J
△C801	VE-30000094	CAP MKT	220NF 275V M	R425	VE-30012714	RES SMD	1/16W 820R J
△C802	VE-30000084	CAP MKT	150NF 275V M	R426	VE-30000718	RES CF	1/4W 4.7K J
C805	VE-30012585	CAP SMD	2.2NF 50V K R	R427	VE-30012657	RES SMD	1/16W 1K J
C806	VE-30012574	CAP SMD	470PF 50V J	R428	VE-30012696	RES SMD	1/16W 47K J
C807	VE-30000090	CAP MKT	22NF 100V J	R429	VE-30000466	RES CF	1/4W 1K J
C808	VE-30000418	CAP EL	100UF 400V M	R430	VE-30000466	RES CF	1/4W 1K J
C810	VE-30000315	CAP SMD	220NF 25V Z	R431	VE-30000466	RES CF	1/4W 1K J
C811	VE-30000345	CAP EL	10UF 50V M	R433	VE-30000712	RES CF	1/4W 470R J
C812	VE-30000161	CAP MKP	47NF 630Vdc / 622Vpp J	R434	VE-30012657	RES SMD	1/16W 1K J
C814	VE-30000447	CAP CER	4.7NF 4KV M E	R435	VE-30012659	RES SMD	1/16W 2.2K J
C815	VE-30000294	CAP SMD	100NF 50V K	R436	VE-30012674	RES SMD	1/16W 27K J
C816	VE-30013533	CAP CER	100PF 1KV K	R437	VE-30012642	RES SMD	1/16W 120K J
C817	VE-30000431	CAP CER	100PF 1KV M	R457	VE-30012641	RES SMD	1/16W 10K J
C818	VE-30000433	CAP CER	1NF 1KV M B	R460	VE-30012698	RES SMD	1/16W 5.6K J
C819	VE-30000407	CAP EL	470UF 16V M	R461	VE-30012641	RES SMD	1/16W 10K J
C820	VE-30000404	CAP EL	47UF 160V M (HR) 105°	R462	VE-30012641	RES SMD	1/16W 10K J
C821	VE-30000294	CAP SMD	100NF 50V K	R463	VE-30012696	RES SMD	1/16W 47K J
C822	VE-30018416	CAP EL	470UF 16V M 105°	R464	VE-30012696	RES SMD	1/16W 47K J
C823	VE-30000352	CAP EL	100UF 16V M	R465	VE-30012508	RES SMD	1/16W 1.8K J
C824	VE-30000352	CAP EL	100UF 16V M	R467	VE-30012641	RES SMD	1/16W 10K J
C825	VE-30000352	CAP EL	100UF 16V M	R468	VE-30012641	RES SMD	1/16W 10K J
C826	VE-30000092	CAP MKT	220NF 63V J	R469	VE-30012683	RES SMD	1/16W 330K J
C827	VE-30006672	CAP EL	47UF 160V M	R470	VE-30000670	RES CF	1/4W 330K J
C828	VE-30013533	CAP CER	100PF 1KV K	R474	VE-30000748	RES CF	1/4W 5.6K J
C832	VE-30009208	CAP CER	470PF 1KV K	R477	VE-30012662	RES SMD	1/16W 2.7K J
C834	VE-30007308	CAP CER	220PF 1KV K	R478	VE-30014022	RES SMD	1/16W 47R J
C837	VE-30009208	CAP CER	470PF 1KV K	R479	VE-30012510	RES SMD	1/16W 100R J
C839	VE-30000294	CAP SMD	100NF 50V K	R502	VE-30012695	RES SMD	1/16W 470R J
C840	VE-30000294	CAP SMD	100NF 50V K	R503	VE-30012707	RES SMD	1/16W 680R J
C905	VE-30012568	CAP SMD	270PF 50V J	R504	VE-30012679	RES SMD	1/16W 3.9K J
C907	VE-30012568	CAP SMD	270PF 50V J	R506	VE-30012506	RES SMD	1/16W 1.5K J
C909	VE-30012568	CAP SMD	270PF 50V J	R507	VE-30012657	RES SMD	1/16W 1K J
C910	VE-30000434	CAP CER	1NF 2KV K B	R508	VE-30014022	RES SMD	1/16W 47R J
C911	VE-30012579	CAP SMD	82PF 50V J	R509	VE-30012641	RES SMD	1/16W 10K J
C912	VE-30012579	CAP SMD	82PF 50V J	R510	VE-30012673	RES SMD	1/16W 270R J
C913	VE-30012579	CAP SMD	82PF 50V J	R511	VE-30012508	RES SMD	1/16W 1.8K J
C915	VE-30012567	CAP SMD	220PF 50V J	R512	VE-30000459	RES CF	1/4W 100R J
C916	VE-30012567	CAP SMD	220PF 50V J	R513	VE-30000459	RES CF	1/4W 100R J
C917	VE-30012567	CAP SMD	220PF 50V J	R514	VE-30012657	RES SMD	1/16W 1K J
PL101	VE-30000345	CAP EL	10UF 50V M	R515	VE-30012692	RES SMD	1/16W 4.7K J
S102	VE-30012560	CAP SMD	100PF 50V J	R516	VE-30012692	RES SMD	1/16W 4.7K J
X403	VE-30000074	CAP MKT	100NF 63V J	R517	VE-30012692	RES SMD	1/16W 4.7K J
R101	VE-30012509	RES SMD	1/16W 100K J	R518	VE-30012659	RES SMD	1/16W 2.2K J
R102	VE-30012641	RES SMD	1/16W 10K J	R519	VE-30012659	RES SMD	1/16W 2.2K J
R106	VE-30012696	RES SMD	1/16W 47K J	R520	VE-30012698	RES SMD	1/16W 5.6K J
R109	VE-30012641	RES SMD	1/16W 10K J	R526	VE-30012657	RES SMD	1/16W 1K J
R110	VE-30012713	RES SMD	1/16W 75R J	R528	VE-30012668	RES SMD	1/16W 220R J
R111	VE-30012713	RES SMD	1/16W 75R J	R529	VE-30000590	RES CF	1/4W 2.2K J
R112	VE-30012696	RES SMD	1/16W 47K J	R530	VE-30012641	RES SMD	1/16W 10K J
R113	VE-30012713	RES SMD	1/16W 75R J	R531	VE-30012698	RES SMD	1/16W 5.6K J
R114	VE-30012692	RES SMD	1/16W 4.7K J	R533	VE-30012698	RES SMD	1/16W 5.6K J
R115	VE-30012713	RES SMD	1/16W 75R J	R534	VE-30000500	RES CF	1/4W 12K J
R117	VE-30012986	RES SMD	1/16W 68R J	R535	VE-30012506	RES SMD	1/16W 1.5K J
R118	VE-30012713	RES SMD	1/16W 75R J	R537	VE-30000471	RES CF	1/4W 10K J
R121	VE-30012657	RES SMD	1/16W 1K J	R541	VE-30000500	RES CF	1/4W 12K J
R123	VE-30014128	RES SMD	1/16W 33R J	R542	VE-30012508	RES SMD	1/16W 1.8K J
R125	VE-30012713	RES SMD	1/16W 75R J	R546	VE-30012692	RES SMD	1/16W 4.7K J
R126	VE-30012695	RES SMD	1/16W 470R J	R547	VE-30012641	RES SMD	1/16W 10K J
R127	VE-30012713	RES SMD	1/16W 75R J	R560	VE-30000525	RES CF	1/2W 1.5K J
R128	VE-30000459	RES CF	1/4W 100R J	R563	VE-30012692	RES SMD	1/16W 4.7K J
R130	VE-30012641	RES SMD	1/16W 10K J	R564	VE-30012641	RES SMD	1/16W 10K J
R131	VE-30012649	RES SMD	1/16W 150R J	R565	VE-30012641	RES SMD	1/16W 10K J
R132	VE-30012649	RES SMD	1/16W 150R J	R566	VE-30012641	RES SMD	1/16W 10K J
R201	VE-30012674	RES SMD	1/16W 27K J	R568	VE-30000459	RES CF	1/4W 100R J
R203	VE-30000583	RES CF	1/4W 220R J	R601	VE-30000723	RES CF	1/4W 47K J
R204	VE-30012692	RES SMD	1/16W 4.7K J	R602	VE-30012642	RES SMD	1/16W 120K J
R206	VE-30000583	RES CF	1/4W 220R J	R603	VE-30012711	RES SMD	1/16W 75K J
R401	VE-30014076	RES SMD	1/16W 4.7R J	R604	VE-30000718	RES CF	1/4W 4.7K J
R402	VE-30014076	RES SMD	1/16W 4.7R J	R605	VE-30012641	RES SMD	1/16W 10K J
R408	VE-30000466	RES CF	1/4W 1K J	R607	VE-30015578	RES SMD	1/16W 2.2R J
R409	VE-30012510	RES SMD	1/16W 100R J	R609	VE-30001145	RES MO	1W 33R J
R410	VE-30012707	RES SMD	1/16W 680R J	R610	VE-30000519	RES CF	1/4W 150R J
R411	VE-30012657	RES SMD	1/16W 1K J	R611	VE-30000650	RES CF	1/4W 33R J
R412	VE-30012667	RES SMD	1/16W 220K J	R612	VE-30012508	RES SMD	1/16W 1.8K J
R413	VE-30000712	RES CF	1/4W 470R J	R613	VE-30000828	RES CF	1/4W 8.2M J
R414	VE-30012649	RES SMD	1/16W 150R J	R615	VE-30012510	RES SMD	1/16W 100R J
R415	VE-30012683	RES SMD	1/16W 330K J	R616	VE-30001145	RES MO	1W 33R J
R416	VE-30012713	RES SMD	1/16W 75R J	R617	VE-30012677	RES SMD	1/16W 3.3K J
R417	VE-30012650	RES SMD	1/16W 15K J	R618	VE-30000769	RES CF	1/2W 680R J
R418	VE-30012510	RES SMD	1/16W 100R J	R619	VE-30000910	RES MF	1/2W 1.8R G
R419	VE-30012510	RES SMD	1/16W 100R J	R623	VE-30000869	RES MF	1/4W 12K J
R420	VE-30000466	RES CF	1/4W 1K J	R624	VE-30000594	RES CF	1/4W 22K J
R421	VE-30012674	RES SMD	1/16W 27K J	R625	VE-30000469	RES SMD	1/10W 1K J
R422	VE-30012662	RES SMD	1/16W 2.7K J	△R626	VE-30001215	RES FUSE	1W 1R J
				R627	VE-30000718	RES CF	1/4W 4.7K J

△Ref No.	Part No.	Part Name	Description Local
R628	VE-30014941	RES CF	1/4W 16K J
R629	VE-30000594	RES CF	1/4W 22K J
R631	VE-30012508	RES SMD	1/16W 1.8K J
R633	VE-30000564	RES CF	1/4W 18K J
R635	VE-30012659	RES SMD	1/16W 2.2K J
R636	VE-30006757	RES MO	1W 560R J
△R637	VE-30001225	RES FUSE	1/4W 0.22R J
R638	VE-30006757	RES MO	1W 560R J
R639	VE-30002731	RES SMD	1/10W 68R J
R640	VE-30002731	RES SMD	1/10W 68R J
R801	VE-30000983	RES MF	1/4W 4.7K F
R802	VE-30012642	RES SMD	1/16W 120K J
R803	VE-30007207	RES SMD	1/10W 22K F
R804	VE-30000466	RES CF	1/4W 1K J
R805	VE-30000466	RES CF	1/4W 1K J
R807	VE-30001157	RES MO	1W 330K J
R808	VE-30000452	RES CF	1/4W 10R J
R809	VE-30001183	RES MO	2W 56K J
R810	VE-30017136	RES MO	1W 0.56R J
△R811	VE-30001257	RES MG	1/2W 4.7M J
R813	VE-30000470	RES CF	1/2W 10K J
R814	VE-30000649	RES CF	1/2W 33R J
R815	VE-30000524	RES SMD	1/10W 150R J
R816	VE-30000470	RES CF	1/2W 10K J
R817	VE-30000594	RES CF	1/4W 22K J
R820	VE-30000469	RES SMD	1/10W 1K J
△R821	VE-30001229	RES FUSE	1W 2.2R J
R828	VE-30001185	RES MO	2W 5.6R J
R829	VE-30012714	RES SMD	1/16W 820R J
△R830	VE-30001245	RES FUSE	1/4W 0.47R J
R831	VE-30012677	RES SMD	1/16W 3.3K J
△R832	VE-30018085	CAP VAR	510V K
R901	VE-30012688	RES SMD	1/16W 390R J
R902	VE-30012688	RES SMD	1/16W 390R J
R903	VE-30012688	RES SMD	1/16W 390R J
R904	VE-30012508	RES SMD	1/16W 1.8K J
R905	VE-30012508	RES SMD	1/16W 1.8K J
R906	VE-30012508	RES SMD	1/16W 1.8K J
R907	VE-30014022	RES SMD	1/16W 47R J
R908	VE-30014022	RES SMD	1/16W 47R J
R909	VE-30014022	RES SMD	1/16W 47R J
R910	VE-30012695	RES SMD	1/16W 470R J
R911	VE-30012695	RES SMD	1/16W 470R J
R912	VE-30012695	RES SMD	1/16W 470R J
R913	VE-30001116	RES MO	2W 18K J
R914	VE-30001116	RES MO	2W 18K J
R915	VE-30001116	RES MO	2W 18K J
R916	VE-30000459	RES CF	1/4W 100R J
R917	VE-30012510	RES SMD	1/16W 100R J
R918	VE-30012510	RES SMD	1/16W 100R J
R919	VE-30000526	RES CF	1/4W 1.5K J
R920	VE-30000526	RES CF	1/4W 1.5K J
R921	VE-30000526	RES CF	1/4W 1.5K J
J142	VE-30000461	RES CF	1/6W 100R J
L104	VE-30001734	JUMPER SMD	
L201	VE-30001992	FIXED COIL	10UH
L204	VE-30001984	FIXED COIL	2.2UH
L402	VE-30001992	FIXED COIL	10UH
L403	VE-30001990	FIXED COIL	6.8UH
L404	VE-30001987	FIXED COIL	4.7UH
L407	VE-30001992	FIXED COIL	10UH
L410	VE-30001992	FIXED COIL	10UH
L601	VE-30001990	FIXED COIL	6.8UH
L803	VE-30001984	FIXED COIL	2.2UH
L806	VE-30002011	FIXED COIL	150UH
L811	VE-30001990	FIXED COIL	6.8UH
J128	VE-30002002	FIXED COIL	47UH
J168	VE-30001992	FIXED COIL	10UH
△TR601	VE-30017788	TRF FBT	
△TR801	VE-30015302	TRF SMPS	
△F801	VE-30001731	FUSE	2.5A
L101	VE-30001971	FERRITE SMD	
L103	VE-30001971	FERRITE SMD	
L105	VE-30001971	FERRITE SMD	
L106	VE-30001971	FERRITE SMD	
L406	VE-30001971	FERRITE SMD	
△L801	VE-30002100	LINE FILTER	
L802	VE-30001971	FERRITE SMD	
L804	VE-30001971	FERRITE SMD	
L805	VE-30001971	FERRITE SMD	
LX810	VE-30010964	FERRITE SMD	
PL102	VE-30015053	SOCKET SCART	
△PL902	VE-30001860	SOCKET CRT	
SW501	VE-30015988	SWITCH TACT	

△Ref No.	Part No.	Part Name	Description Local
SW502	VE-30015988	SWITCH TACT	
SW503	VE-30015988	SWITCH TACT	
SW504	VE-30015988	SWITCH TACT	
△SW801	VE-30017848	SWITCH ON/OFF	
△TH800	VE-30001270	PTC	9 OHM
TU201	VE-30009637	TUNER WSP (PLL)	
VL405	VE-30026042	ADJ.COIL	
X401	VE-30001749	XTAL	
X402	VE-30015592	XTAL	
X501	VE-30002851	XTAL	
Z401	VE-30001728	TRIPLE TRAP	
Z403	VE-30001690	FILTER SAW	
Z404	VE-30001707	FILTER SAW	

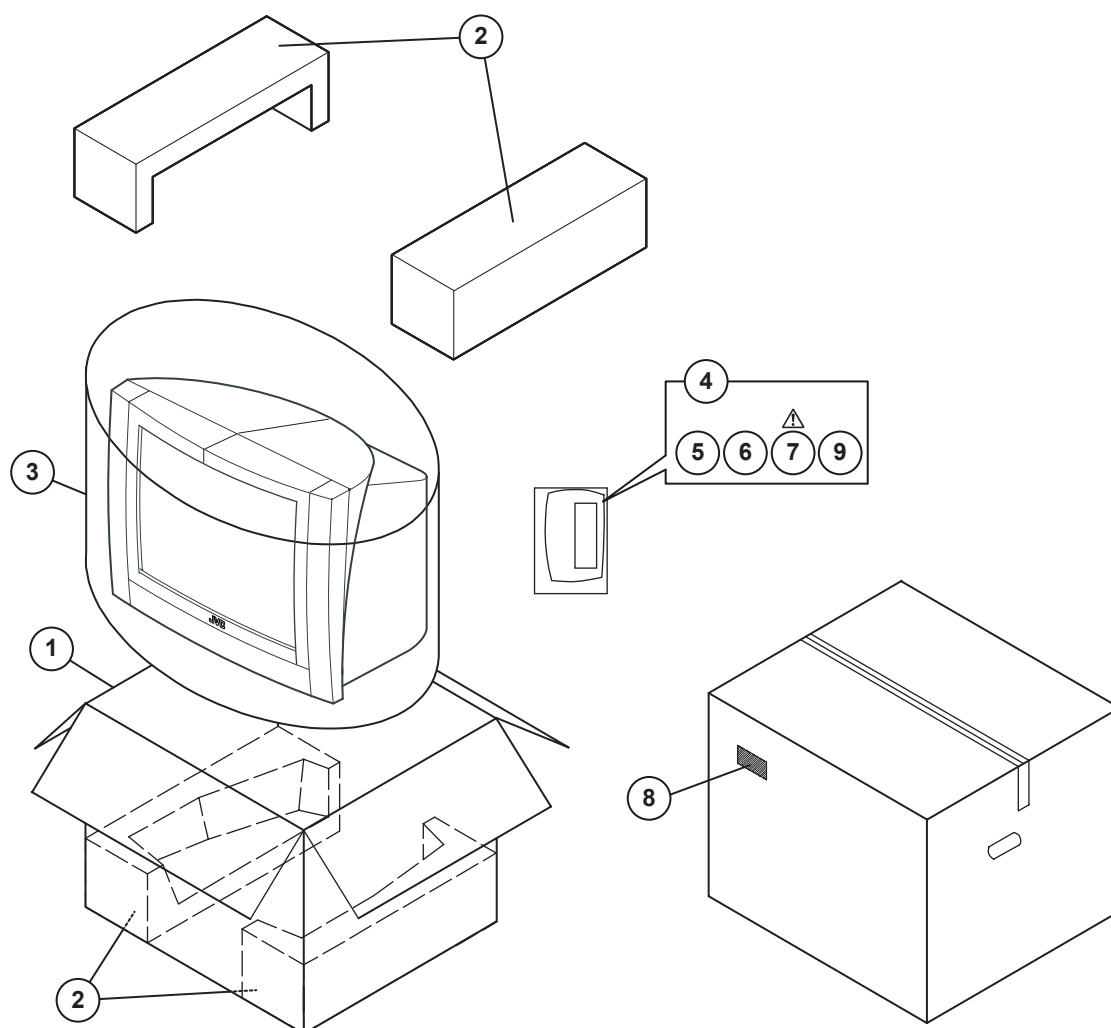
FRONT AV JACK P.W. BOARD ASS'Y (VE-20124552)

REFER TO PARTS LIST IN PAGE 3-6 FOR THIS P.W. BOARD.

HEADPHONE JACK P.W. BOARD ASS'Y (VE-20170438)

REFER TO PARTS LIST IN PAGE 3-6 FOR THIS P.W. BOARD.

PACKING



PACKING PARTS LIST

△	Ref.No.	Part No.	Part Name	Description	Local
	1	VE-50050692	CARTON BOX		AV-14RM4SN
	1	VE-50050686	CARTON BOX		AV-14RM4SP
	1	VE-50050707	CARTON BOX		AV-14RM4SE
	2	VE-20155373	SNOW BOX ASSY	4pcs in 1set	
	3	VE-50018337	POLY BAG	50*90 (15+15)	
	4	VE-70000587	POLY BAG		
	5	VE-30017763	REMOTE CONTROL UNIT	RM-C1100	
	6	-----	WARRANTY CARD	BT-54013-2TK	
△	7	VE-50050690	INST BOOK	Eng/Fre/Ger/Ita/Spa/Dut/Por/Swe/Nor/Dan/Fin	AV-14RM4SN
△	7	VE-50050685	INST BOOK	Eng/Fre/Ger/Ita/Spa/Dut/Por	AV-14RM4SP
△	7	VE-50050706	INST BOOK	Eng/Pol/Cze/Hum/Bul/Rom	AV-14RM4SE
	8	VE-20159451	LABEL		AV-14RM4SN
	8	VE-20159447	LABEL		AV-14RM4SP
	8	VE-20159465	LABEL		AV-14RM4SE
	9	-----	BATTERY	AA/R06 (x2)	
	--	VE-30000001	ANTENNA ROD (W/ADAPTOR)		
	--	VE-50055576	CARTON SEPERATOR	415X500	

AV-14RM4SE AV-14RM4SN AV-14RM4SP

STANDARD CIRCUIT DIAGRAM

CONTENTS

BLOCK DIAGRAMS ----- 2-3

CIRCUIT DIAGRAMS

MAIN PWB CIRCUIT DIAGRAM ----- 2-5

HEADPHONE JACK PWB CIRCUIT DIAGRAM ----- 2-17

FRONT AV JACK PWB CIRCUIT DIAGRAM ----- 2-18

PATTERN DIAGRAMS

MAIN PWB PATTERN ----- 2-19

CRT SOCKET PWB PATTERN ----- 2-21

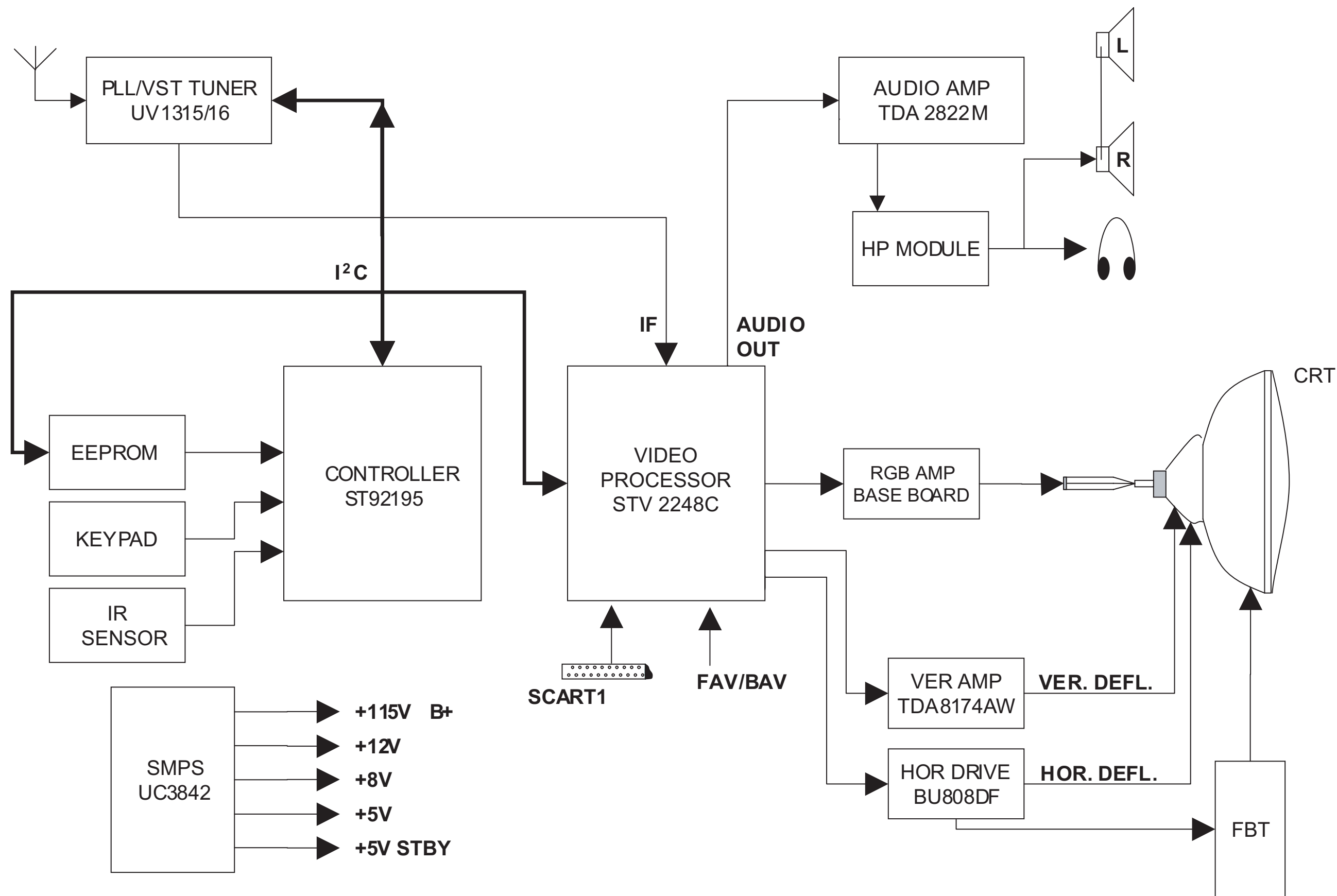
HEADPHONE JACK PWB PATTERN ----- 2-22

FRONT AV JACK PWB PATTERN ----- 2-22

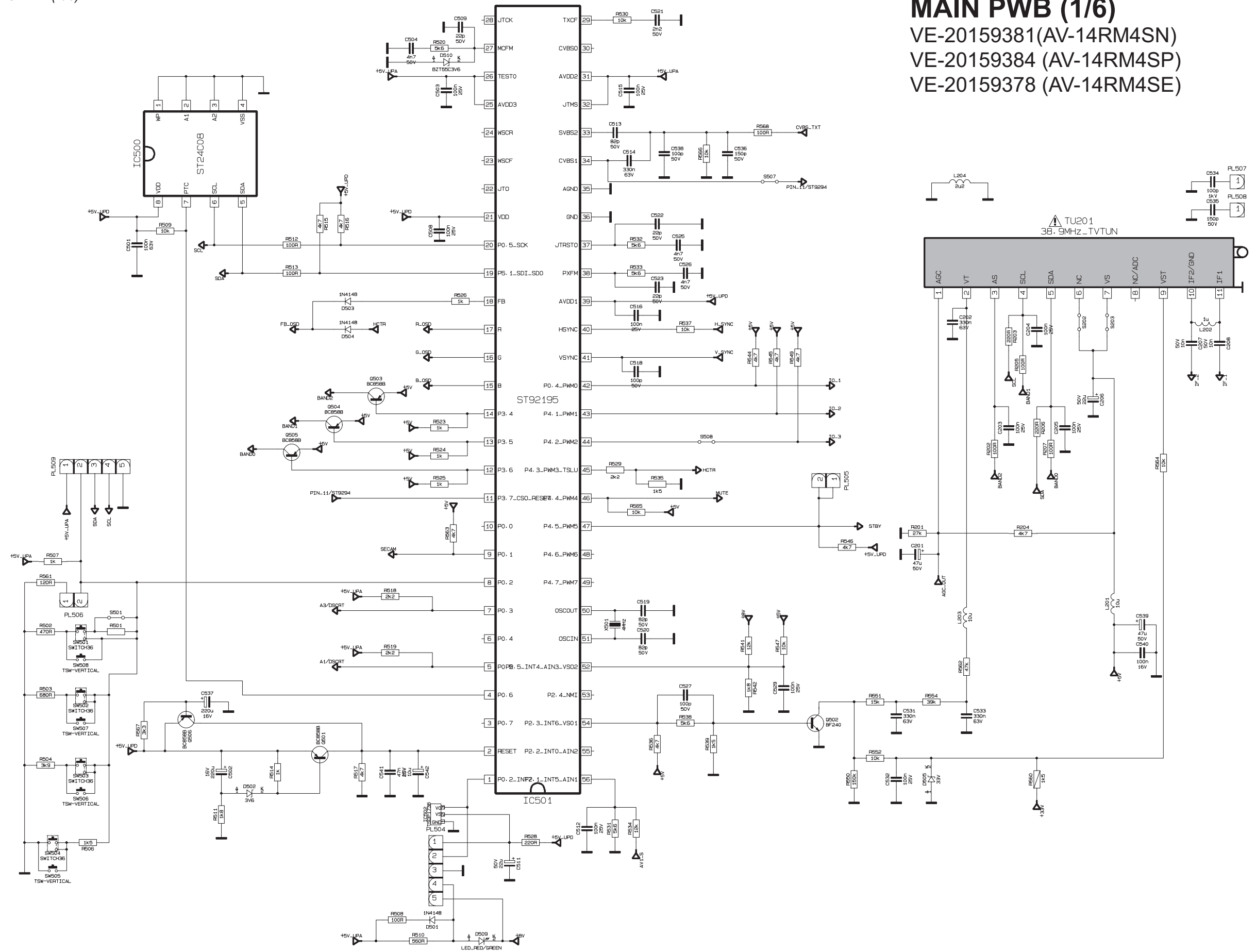
USING P.W. BOARD

P.W.B ASS'Y name	AV-14RM4SE	AV-14RM4SP	AV-14RM4SN
MAIN PWB	VE-20159378	VE-20159384	VE-20159381
HEADPHONE JACK PWB	VE-20170438	←	←
FRONT AV JACK PWB	VE-20124552	←	←

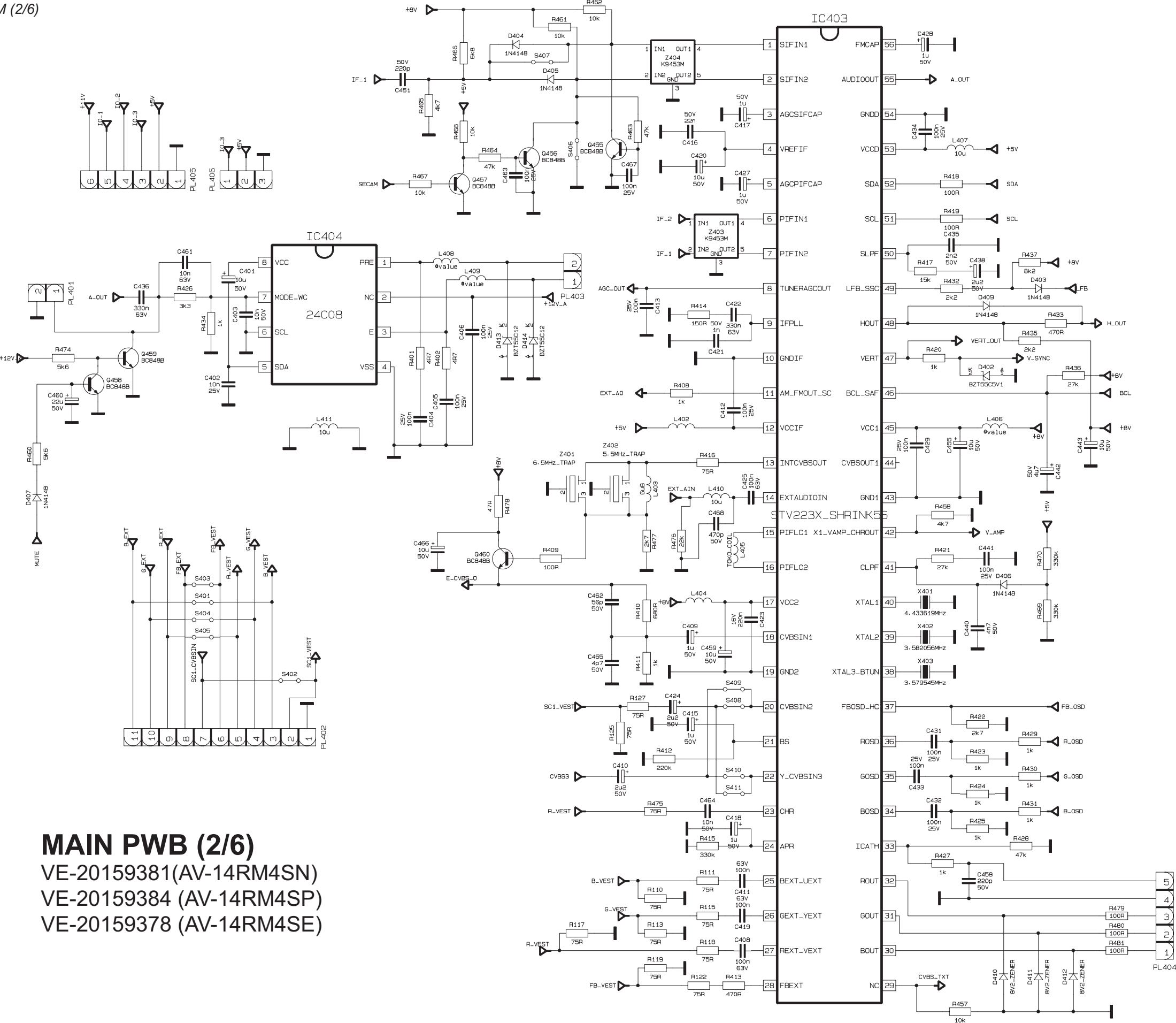
BLOCK DIAGRAM



CIRCUIT DIAGRAMS
MAIN PWB CIRCUIT DIAGRAM (1/6)



MAIN PWB (1/6)
VE-20159381(AV-14RM4SN)
VE-20159384 (AV-14RM4SP)
VE-20159378 (AV-14RM4SE)



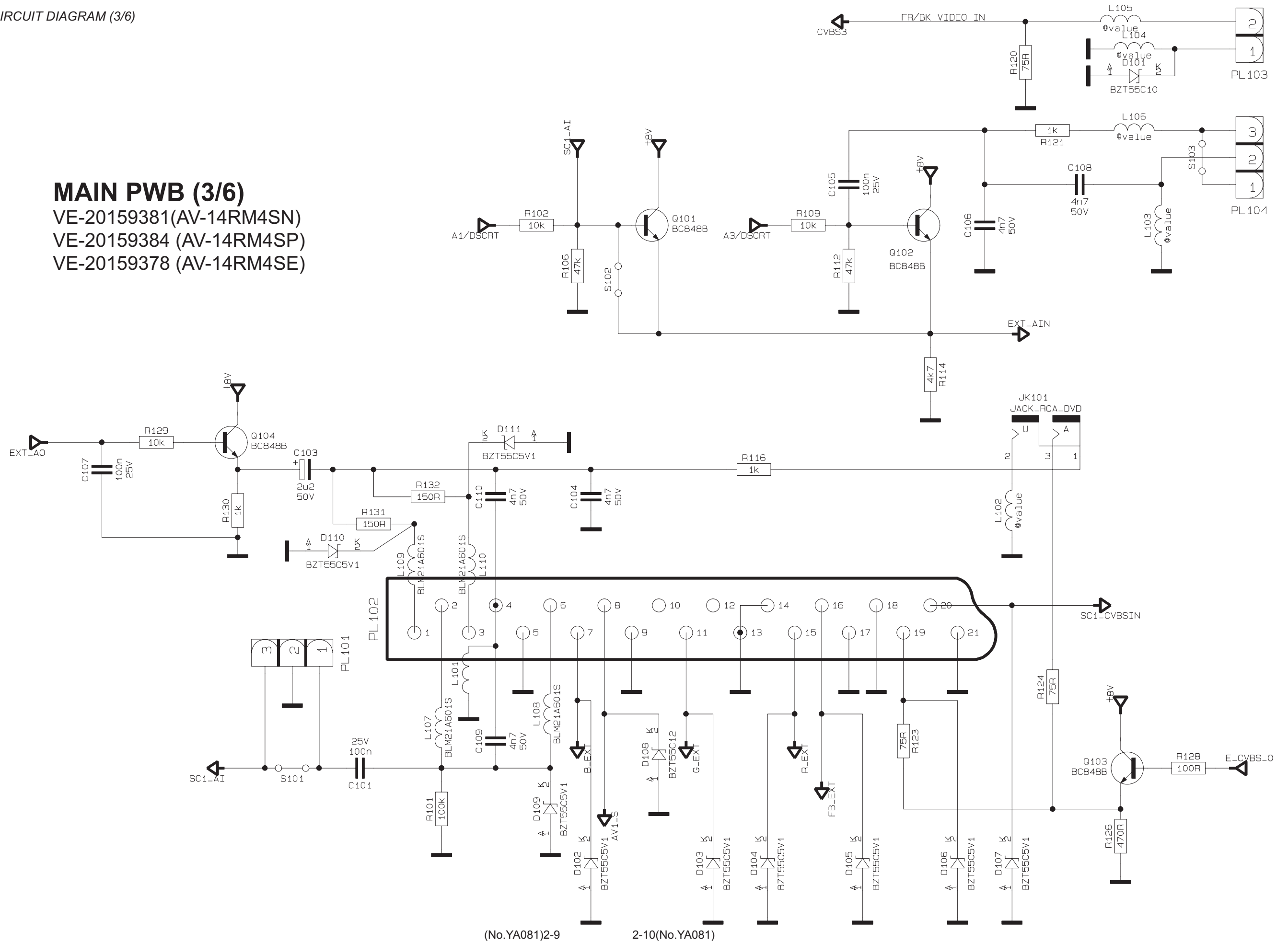
MAIN PWB (2/6)
VE-20159381(AV-14RM4SN)
VE-20159384 (AV-14RM4SP)
VE-20159378 (AV-14RM4SE)

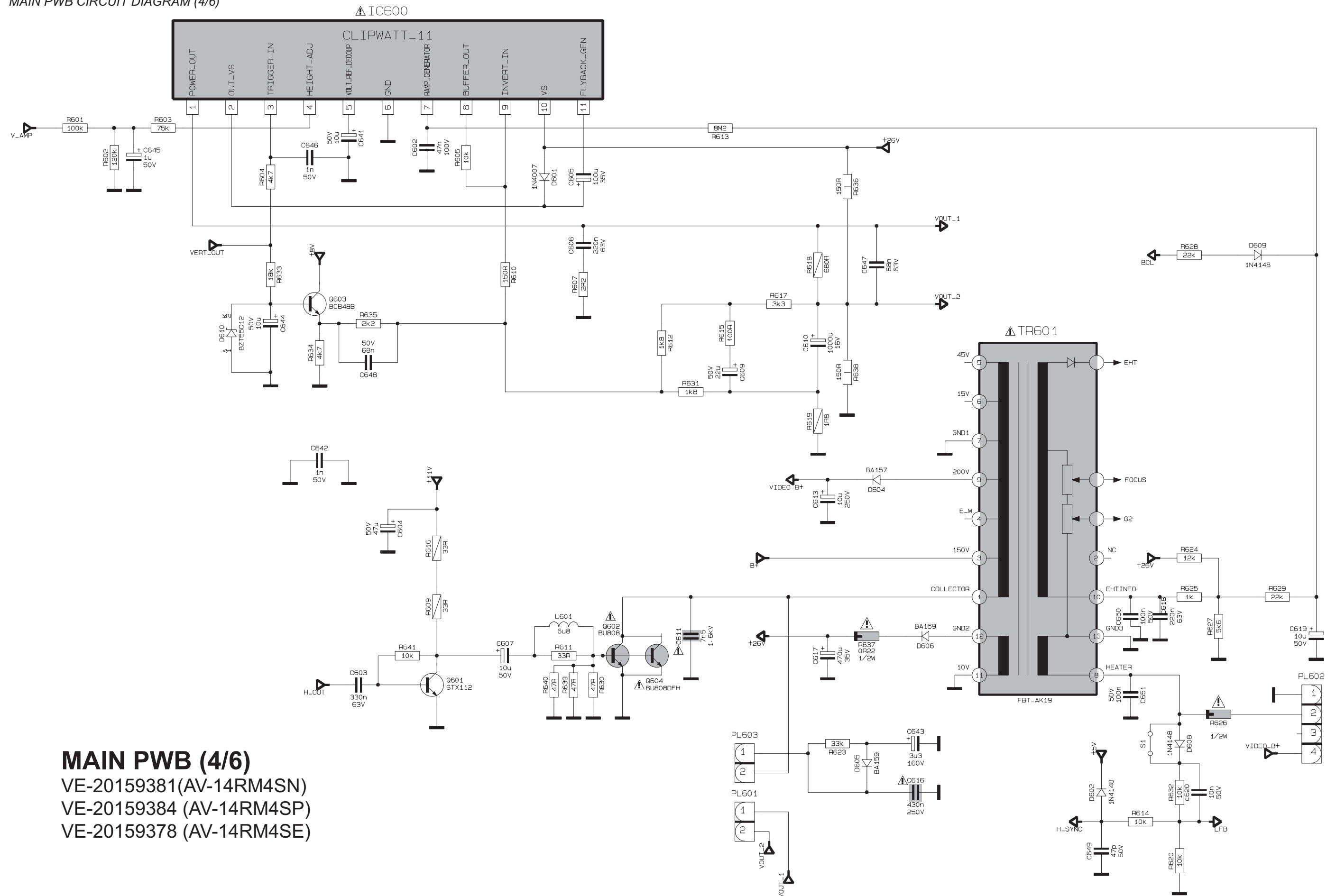
MAIN PWB (3/6)

VE-20159381(AV-14RM4SN)

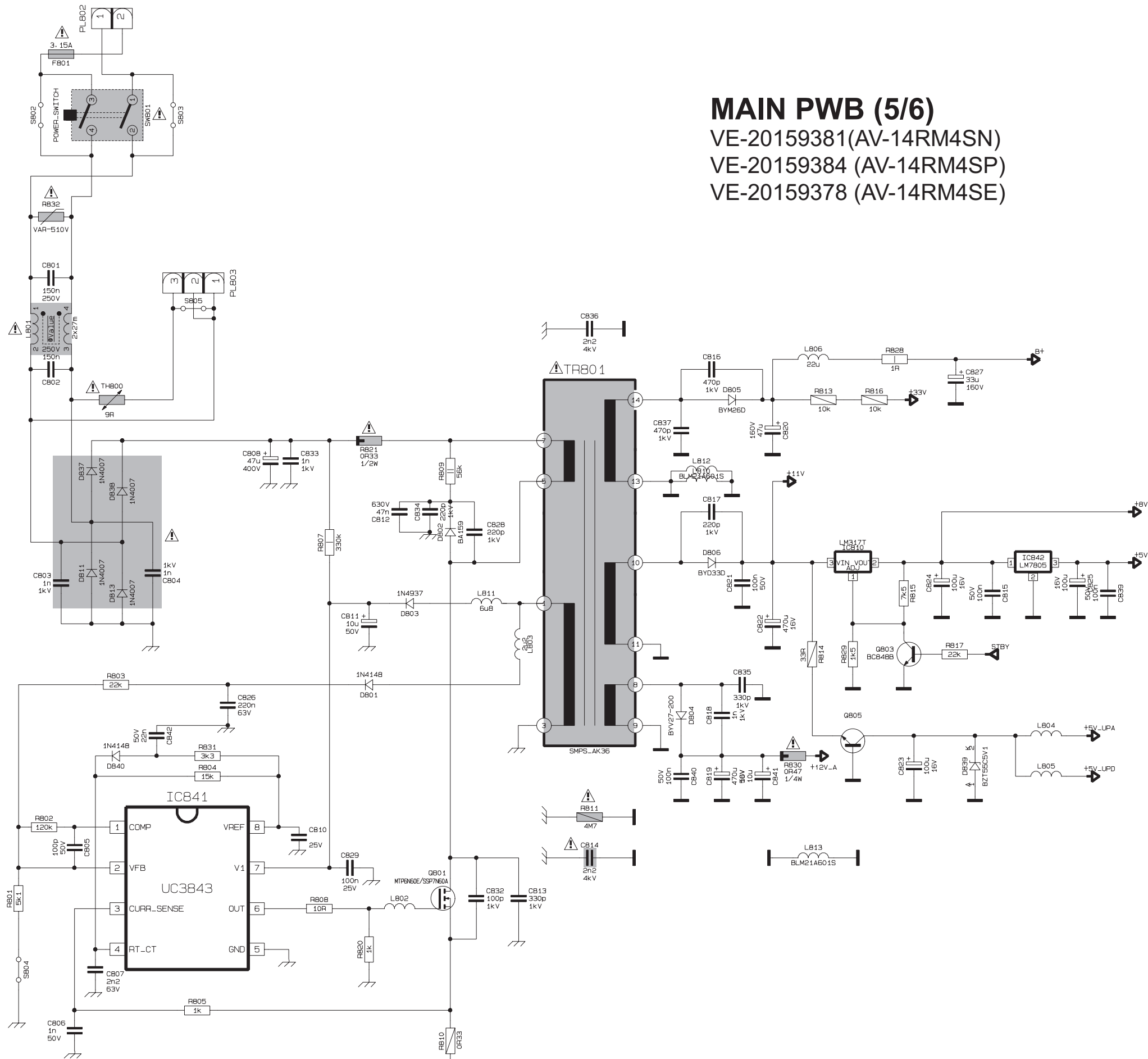
VE-20159384 (AV-14RM4SP)

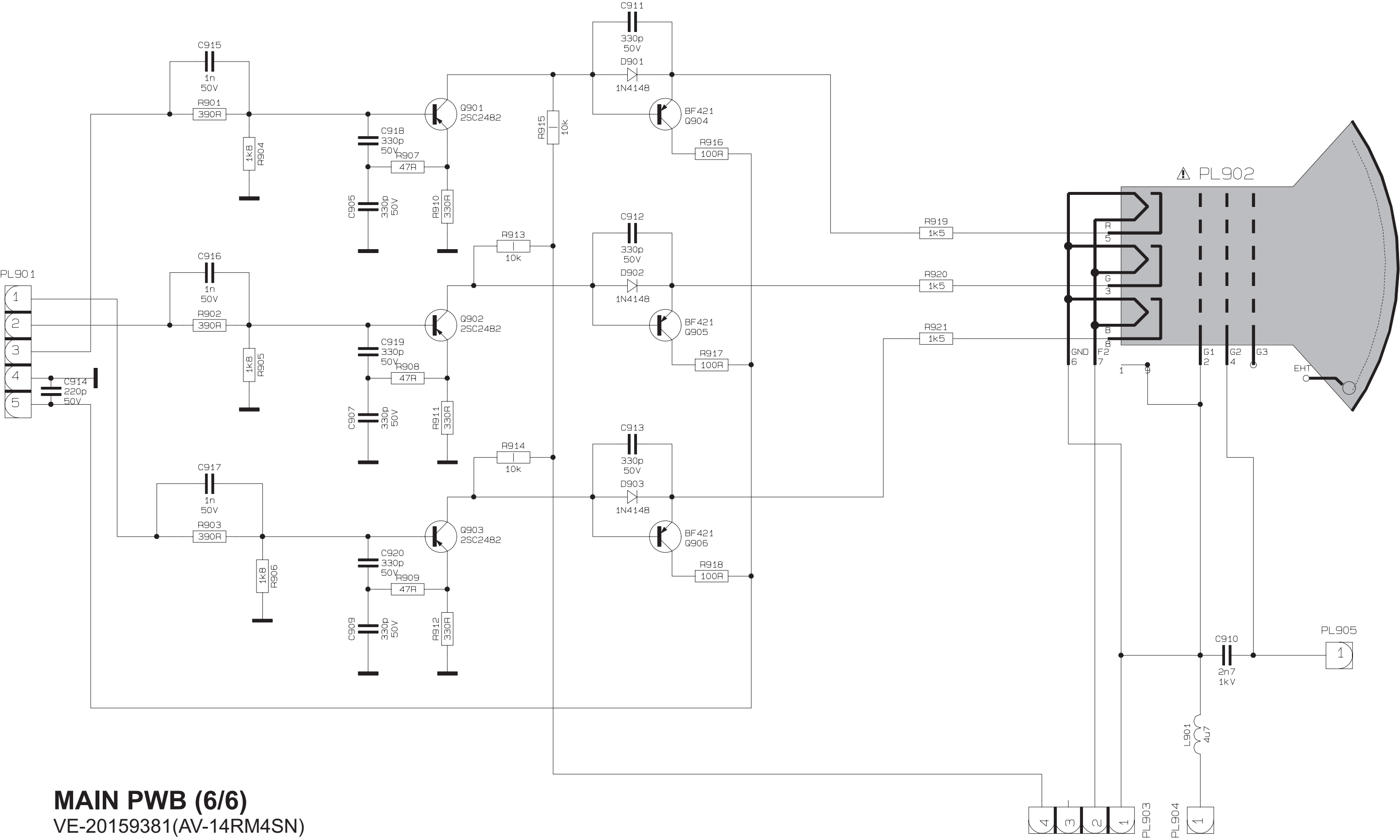
VE-20159378 (AV-14RM4SE)





MAIN PWB (5/6)
VE-20159381(AV-14RM4SN)
VE-20159384 (AV-14RM4SP)
VE-20159378 (AV-14RM4SE)

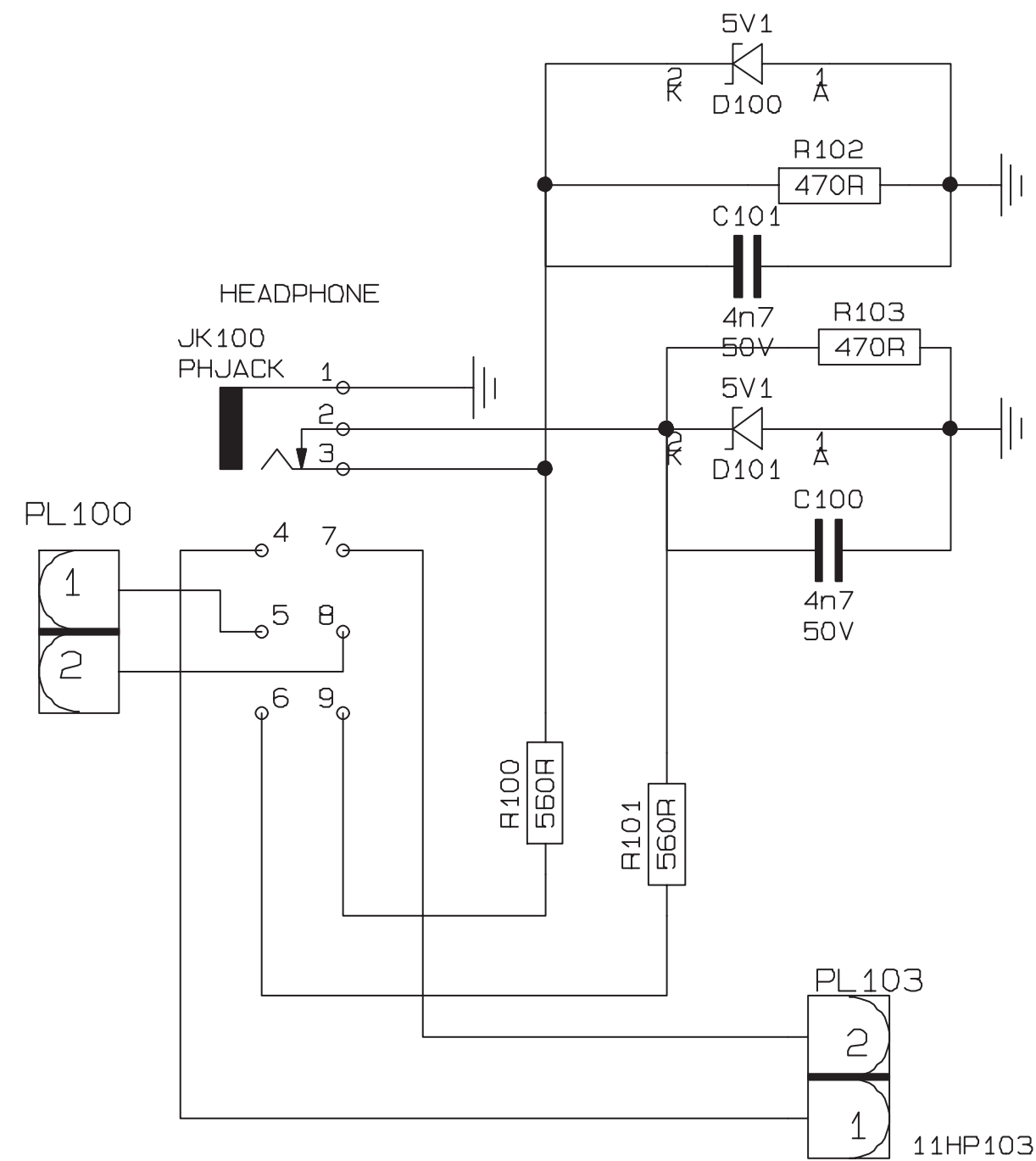




MAIN PWB (6/6)

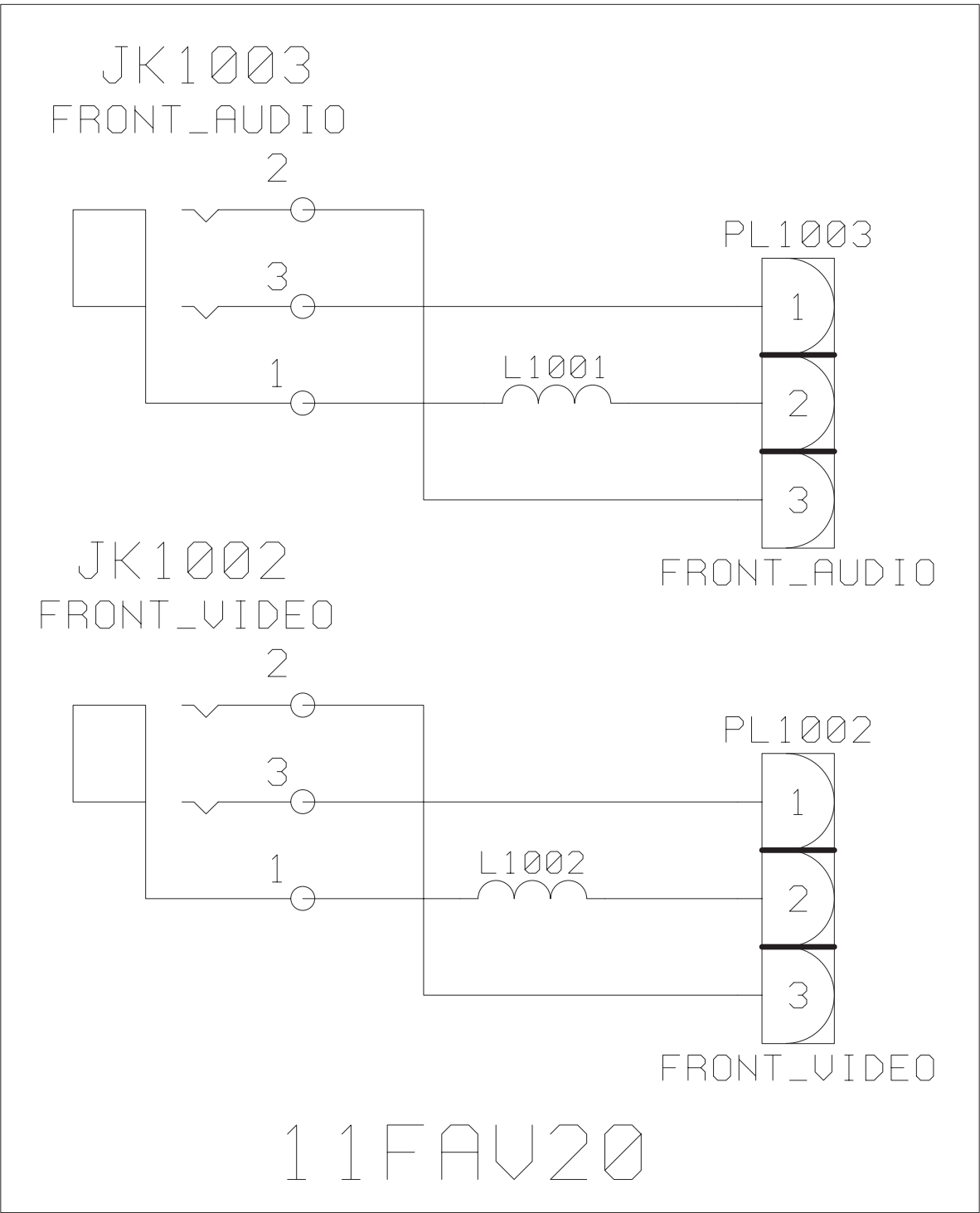
VE-20159381(AV-14RM4SN)
VE-20159384 (AV-14RM4SP)
VE-20159378 (AV-14RM4SE)

HEADPHONE JACK PWB CIRCUIT DIAGRAM



HEADPHONE JACK PWB
VE-20170438

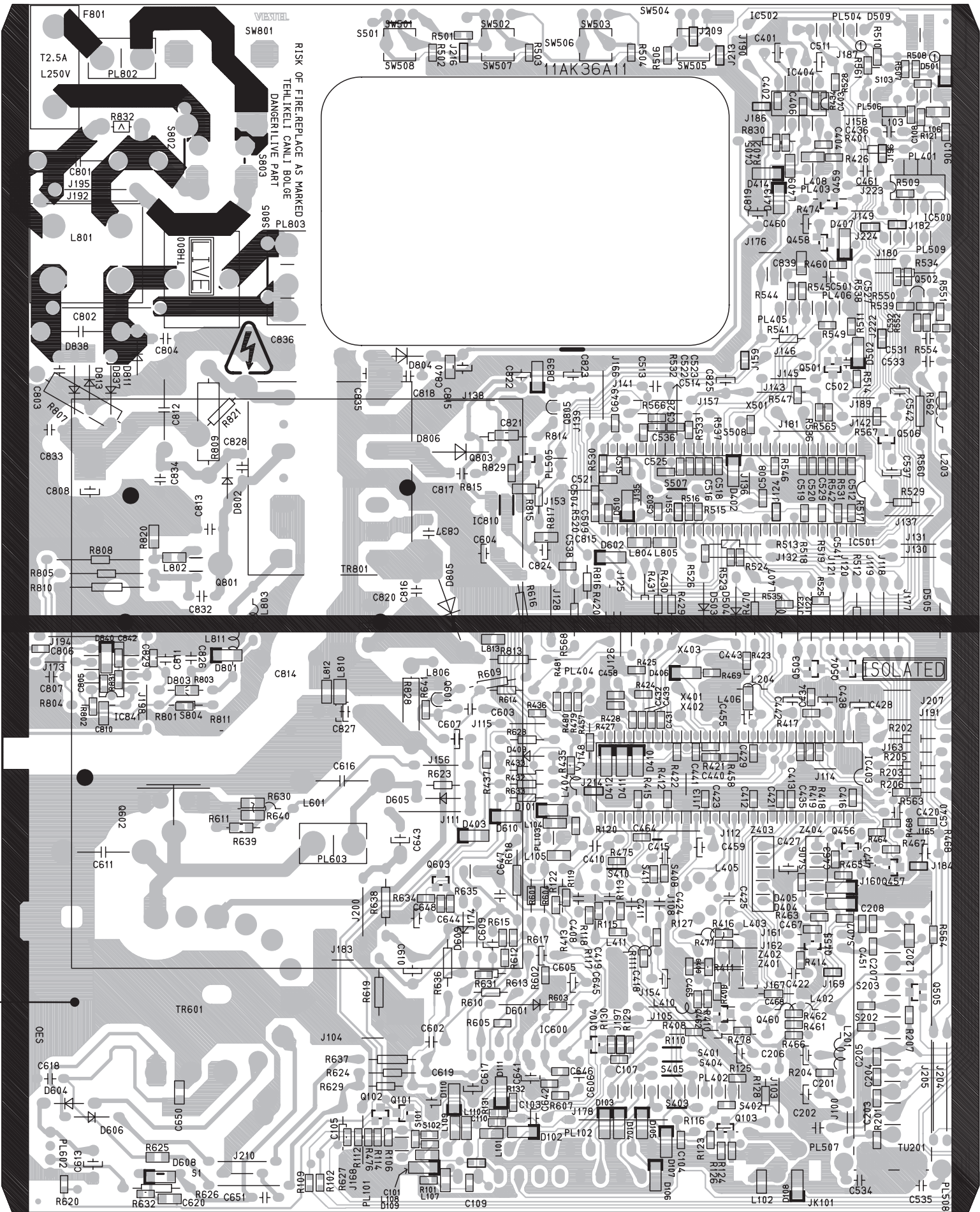
FRONT AV JACK CIRCUIT DIAGRAM



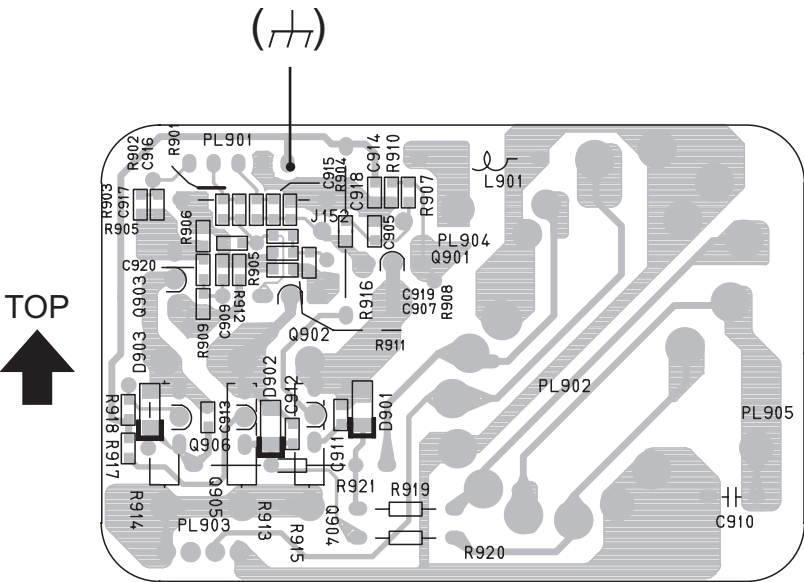
FRONT AV JACK PWB
VE-20124552

PATTERN DIAGRAMS
MAIN PWB PATTERN

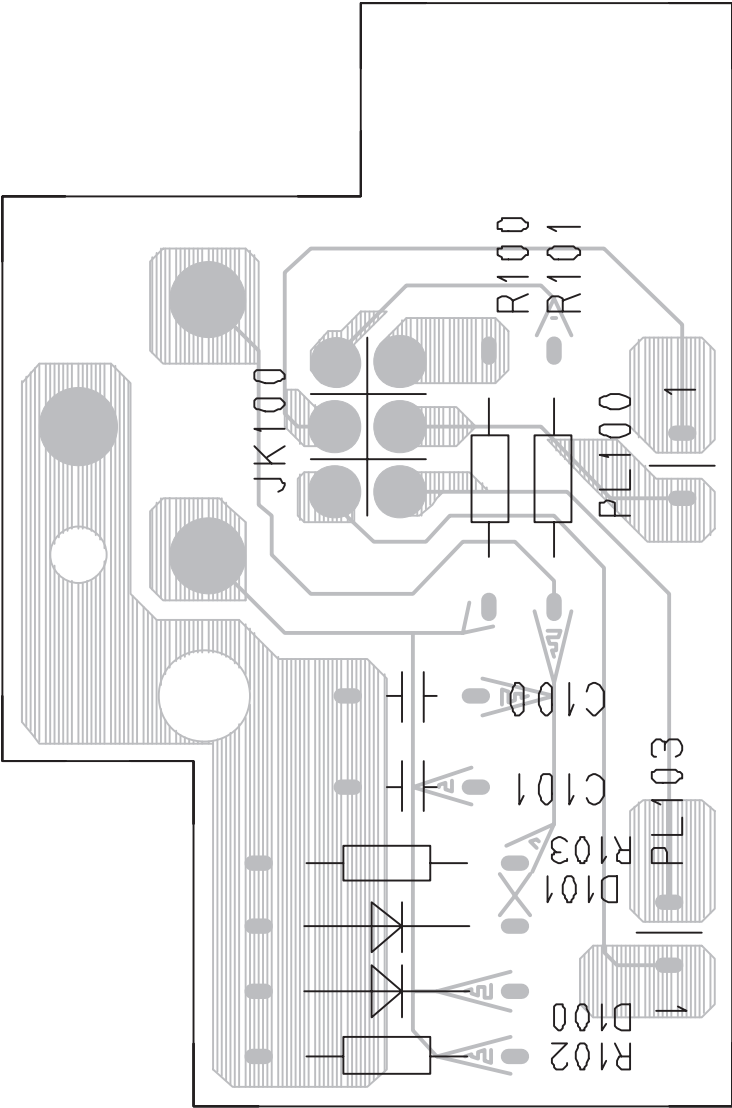
FRONT
↑



CRT SOCKET PWB PATTERN
(Within MAIN PWB)



HEADPHONE JACK PWB PATTERN



FRONT AV JACK PWB PATTERN

